1964

Concept 3

Syracuse School of Architecture

John G. Colby

Richard Crandall

Clark Shaughnessy

Margaret Heinsohn

See next page for additional authors

SCHOOL OF ARCHITECTURE

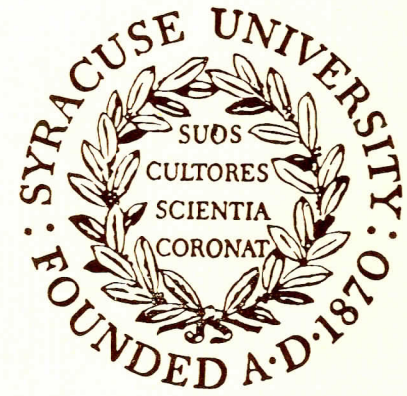
CONCEPT 3

SYRACUSE UNIVERSITY

SCHOOL OF ARCHITECTURE

CONCEPT 8

editor-in-chief	john g. colby
literary editor	richard crandall
layout editors	clark shaughnessy
	margaret heinsohn
photography	jean cote
	frank routman
	harold hoaglin
business manager	robert snow
typist	mrs. w. benedict
technical advisor	arnold poltenson
cover design	john carter



introduction

Concept III, the publication of the Syracuse University School of Architecture for 1964, is devoted to the subject which occupies most of the time and hopefully much of the thought of its students: architectural education.

The subject has been intensively and extensively discussed. Students in the midst of it are quick to seek out the faults of the present system, some real and some imagined.

By presenting a sampling of student work for each year along side of essays, perhaps we can get a better perspective on the results of our present system. One can look for improvements in the work in the later years and look for evidence of corresponding increase in depth of understanding behind the work as revealed in the student's essays.

Does the work represent the calibre work that should be produced by students? If so, how much of this is due to the system? Does a formal education have any effect at all on the development of an exceptional student? Could any other system give noticeably improved results?

The major essays present thoughts on education which can be compared with our system. Can some of the ideas be successfully adopted into any organized system or do they depend solely on the student? Can these ideals be achieved despite an educational system or are the two contradictory?

We have suggested some questions and presented some evidence but leave it to the reader to draw the conclusions. This suggests perhaps the most important and the most difficult question: How can we learn from the results of our present system of architectural education the needed changes for improvement in the future?

EDUCATIONAL FOUNDATION FOR PRACTICE

dean d. kenneth sargent

The sixties may well become known as another transitional period in architectural education. For almost a half century, the five year curriculum, which literally followed the French school, has been the accepted program. Currently, that curriculum is not only questioned but also experimental changes are taking place.

The usual five-year program found in the accredited schools of architecture has provided a sound foundation for practice in the past, but within the last ten years the five-year courses have been deemed by many as inadequate to meet the future needs of the practitioner.

The rapid advance and increase in knowledge in the areas of both physical and social science has greatly modified architectural practice and will continue to do so in the future. The breakthroughs in the physical sciences within the last three decades has not only changed our basic concepts of matter and materials, but it has added new materials and usages. The social sciences are no longer struggling for acceptance. Today, the social sciences are accepted and their research has become the basis for urban changes and different design program concepts.

In 1961 the three-man Special Committee on Education of the American Institute of Architects recommended that schools consider adding a minimum of one year to the traditional five-year program in order to satisfy these new ideas of practice in this age of science. It is interesting to note that at Syracuse University in 1961 the faculties of the School of Architecture and the College of Liberal Arts began to study a new curriculum that would better prepare the professional student for the practice of architecture in the future.

A study indicated that the original five-year program, which had been changed with some regularity over its history, had evolved a curriculum which continued to meet the technical needs of today's practitioner. It offered studies in basic and architectural design to the extent of 67 credit hours or 37% of the total required for graduation. The sequence in structures consisted of 18 credit hours or 10% of the total. The study of materials of construction and systems requires 20 credit hours or 11%. Miscellaneous technical courses cover an additional 19 credit hours or approximately 10%.

History and theory, and philosophy of architecture occupy an

additional 20 credit hours. This group of studies has been presented as a technical study, yet with a humanities background that could place it in a liberal classification. The five-year program has also required 33 credit hours of liberal studies in economics, sociology, mathematics, and electives.

It was in the sphere of liberal education that the former program appeared to be most lacking in its contribution to the foundation for tomorrow's practice. Today the profession is beginning to recognize that an understanding of mankind is necessary in preparation for architectural design. It seems rather obvious that the study of cultural, physical, and environmental anthropology and sociology becomes an essential background for the architect. How can the architect plan and design the most efficient environment for man if he does not know the fundamentals of man's behavior, both social and psychological?

During the study of the curriculum, the deficiences in studies in English, mathematics and science became more evident. A greater depth of fundamental knowledge in the physical sciences would be required if the architect is to successfully apply these principles to design and construction. That far more mathematics would be required than previously offered was demonstrated by the anticipated use of the computer and the advent of new construction methods.

The combined Curriculum Committee of the School of Architecture and Liberal Arts College recognize that a six-year program in which an additional year of liberal subjects was integrated with the existing five-year technical program could provide a strong background and breadth that was lacking in the old curriculum. The additional year's study would make possible a minimum of one year of physics which is so essential to the architectural profession. The possibility for the study of advanced mathematics could also be provided. Opportunity for additional work to the minimum requirements in either of these disciplines was provided for those who desired a stronger background.

An increase in hours of study of English could become a reality with the adoption of a six-year curriculum. The ability to effectively communicate verbally could be improved by adding courses. A better background of literature for the professional might become a minimum essential of the curriculum. The added study of English could give the student greater ability to write clearly and effectively as well as provide the cultural background fitting for a professional. The latter is unquestionably necessary if the architect is to keep his position in tomorrow's society. Obviously any increase in his knowledge of literature can also supply that less tangible asset of seeing more clearly the world about him and enjoying more completely a rich and full life.

The importance of the additional year of liberal courses gave further advantages: the door to studies in philosophy, history, foreign languages, psychology, political science, as well as sociology and economics was opened. The new program indicated that it could be effective in eliminating the possibility of the narrow technician whose education was one of depth in a very restricted scope of knowledge.

As a result of the studies and recommendations of the combined Curriculum Committee of the School of Architecture and the College of Liberal Arts, the new program offered sequences of subjects and diversity of courses that met the requirements for both the Bachelor of Arts degree and the first professional degree of Bachelor of Architecture. Inasmuch as the minimum essentials for the B. A. degree are satisfied by the end of the fifth year, the College of Liberal Arts authorized the award of this degree at the completion of the fifth year. The professional degree of Bachelor of Architecture is then earned at the end of a sixth year, which really becomes a year of graduate study.

This advantage of the greater education maturity of the candidates for the Bachelor of Architecture degree must be recognized in this new program. Observations of the students for the short period since the approval of the new program appears to confirm this.

Though the complexity of practice in future years will make specialization common to the practice of architecture, the foundation studies must remain general in character. Many of the key personnel in an office will continue to be generalists with a breadth of both technical and liberal knowledge. The area of administration and management demands this type of individual. However, other facets of architectural service require a depth of knowledge in somewhat restricted areas as well as the wide span of general education. It is a

of the fundamentals essential to practice yet gives time for greater depth of study for those that desire added background in a specific discipline. It preserves the courses from the old curriculum necessary to introduce the application of these fundamentals to the student. The importance of the courses which teach the application of principle should require little proof. It is interesting that medical education continues to maintain courses of application even though great progress in basic research continues.

The advantages of this new course of study remain to be validly appraised. However, indications point toward realization of the objective for which it was evolved. It attracts many students to the school. It represents one of the first of the extended courses to

be developed.
requisite that foundation education for the first professional degree introduces the future architect to the greatest breadth possible of both general and technical knowledge if he is to effectively serve in any capacity either as generalist or specialist. How can a specialty be determined if the student or neophyte is unaware of all the integrants of complete professional practice?

The new six-year program at Syracuse provides this total spectrum of preparation to a far richer degree than heretofore provided. It is designed to provide the student with a more complete general education as well as the technical preparation for practice.

The new program continues to provide opportunity for the study

requisite that foundation education for the first professional degree introduces the future architect to the greatest breadth possible of both general and technical knowledge if he is to effectively serve in any capacity either as generalist or specialist. How can a specialty be determined if the student or neophyte is unaware of all the integrants of complete professional practice?

The new six-year program at Syracuse provides this total spectrum of preparation to a far richer degree than heretofore provided. It is designed to provide the student with a more complete general education as well as the technical preparation for practice.

The new program continues to provide opportunity for the study of the fundamentals essential to practice yet gives time for greater depth of study for those that desire added background in a specific discipline. It preserves the courses from the old curriculum necessary to introduce the application of these fundamentals to the student. The importance of the courses which teach the application of principle should require little proof. It is interesting that medical education continues to maintain courses of application even though great progress in basic research continues.

The advantages of this new course of study remain to be validly appraised. However, indications point toward realization of the objective for which it was evolved. It attracts many students to the school. It represents one of the first of the extended courses to be developed.

EDUCATION FOR ARCHITECTURE AT SYRAUSE

prof. harley j. mckee

Since the study of architecture was begun here in 1873, having been preceded a few years by the introduction of courses at Massachusetts Institute of Technology, the University of Illinois, and Cornell University, its character has changed in a number of ways. With each change something has been gained -- and something has also been lost. This summary will present one observer's conclusions, without, it is hoped, unduly emphasizing the illusion of "the good old days" or the illusion of "progress." It will not attempt to resolve problems of long standing, about which opinions differ this day.

Although the profession of the "master builder" is very old it has been divided into specialized fields only in modern times. The profession of architecture is distinct from that of civil engineering now, yet 150 years ago the practice of Latrobe embraced both. As late as the 1870's, an architect was not readily distinguishable from a builder, nor was the nature of his services clearly established, and only in the 20th century have legal requirements for architectural practice been put into effect. Before collegiate schools began to teach architecture, the profession was filled by men who had gained experience in building construction or in working under established architects; often they had received a liberal college education as well. A few had studied in European schools of architecture or technology, and it was they who, in large measure, established the curricula of American schools upon the principles and methods of the Polytechnic at Karlsruhe, the Bau-Akademie at Berlin, and the Ecole des Beaux-Arts of Paris. European courses were not adopted bodily, however; their features were combined with existing American college subjects and modified to suit professional practices -- by practical men. At first, architectural curricula in American colleges took several different directions: 1) a liberal education with a few technical courses added, 2) a technical education based largely on German models, and 3) an education largely oriented toward the fine arts, as at Syracuse. Before long the "art and science of design" exemplified by the Ecole des Beaux-Arts assumed an important place in most of the schools. These elements, to which were added features of American engineering education, were fairly well blended in the curricula of the nine[1] collegiate schools of architecture in the United States by the end of the 19th century. The degree of emphasis appropriate to each element is still disputed.

The College of Fine Arts -- the first in the United States to grant a degree -- was formed in 1873 and offered courses in painting and architecture; later music was added. Students enrolled in architecture were taught architectural drawing (which apparently included design), freehand drawing and painting, mathematics, construction, foreign languages, history, sciences, and art history. Architectural subjects were taught at first by two volunteers, architects Archimedes Russell and Joseph Lyman Silsbee, both of whom were fine draftsmen and designers, as well as practical men then near the beginning of long and successful careers. Painting was also taught by practicing artists. This set a pattern which has persisted. The great majority of teachers since

then have actively engaged in practice, being first of all architects devoted to the profession who considered teaching as only one part, although an important one, of a whole career.

By the 1890's, the number of Americans who had studied in Paris was such that a Society of Beaux-Arts Architects was founded in New York. The convictions of these men and the influence of the institution which came to be called the Beaux-Arts Institute of Design (BAID) did much to modify architectural education and practice. It is now fashionable for persons with little actual knowledge of the BAID to condemn it in toto but in its time it fulfilled a useful purpose. The BAID was not a school itself; it organized a comprehensive program of design study which was widely used in architectural schools and by draftsmen in offices as well. It issued programs and held judgements, thus bringing students all across the country into direct competition with each other. This kind of competition helped raise the standards of poorer schools and develop a feeling of nation-wide solidarity among students. It also put a premium on concentrated design study, draftsmanship and techniques of presentation. The project or problem-solving method of study became firmly established; it characterizes most architectural education today. The esquisse -- a nine-hour committal sketch -- which initiated each design project, encouraged the student to analyze the basic elements of a problem and make an early choice of the direction he would follow in its solution and development. He was prepared to do this by preliminary research on the type of building involved, although the specifics of the program were not divulged until it was actually issued. The esquisse method had some drawbacks but its value was such that no adequate substitute has yet been found. Strong competitive feeling eventually led to excesses and abuses, so that in the 1930's when the BAID type of design study was rapidly declining, it was referred to as "architectural football."

Syracuse during these decades followed a pattern similar to that of many other schools, participating in the BAID competitions and receiving its share of the awards; especially in the measured drawing category there were numerous medals. Probably among all of the teachers of this time Fred Lear most closely personified the Beaux-Arts ideal. The curriculum in 1925 gave great emphasis to architectural design, drawing and theory, but included a substantial amount of mathematics, construction, freehand drawing and history of architecture, with a smattering of other subjects, some of which, like stereotomy and history of ornament, reflected conditions then current, but have now become extinct.

The great depression of the 1930's, which brought the practice of architecture to a virtual halt for several years, also marked a turning point in education for the profession. The depression itself was not so much a cause as it was a time for the release of pressures which had been building up. European "modernism" in painting and architecture had been developing from early in the 20th century but only small and superficial traces of it had appeared in American architecture. The German Bauhaus of the 1920's brought teachers of a new kind into the field of art education. "Abstract" artists, industrialists, and architects sought a direct approach encompassing the new materials, techniques and objectives of industrial mass production and making use of discoveries by "form psychologists." They attempted to break away completely from traditional concepts of art and architecture, although not from discipline. A new vocabulary of form and space was worked out at the Bauhaus before the rise to power of Adolf Hitler, and with the dispersal of its teachers by the reactionary art philosophy of the Third Reich its "basic design" approach began to modify architectural study in the United States. The teachings of Walter Gropius at Harvard University are so widely known that they need not be explained here. The change from a four-year to a five-year curriculum at Syracuse took place in about the same way

as at other schools. The four-year term of architectural study came increasingly under attack during the 1920's; if technical courses were adequate to meet the needs of an increasingly complex building technology there was insufficient time for academic subjects. Architectural study was too narrow, it was said; graduates lacked a balanced education. A number of colleges offered to specialized options -- architecture and architectural engineering, later called design option and structural option. This helped achieve technical competence but it contributed little to educational balance. At a number of schools students were encouraged to elect additional studies and lengthen their course to five years. In the 1930's a five-year curriculum became mandatory; to the four years of technical studies was added a year of "general" study. The resulting four-to-one ratio has been a kind of "sacred cow" ever since.

In 1934 L. C. Dillenback came to Syracuse to teach architectural design; he was soon placed in charge of the Department of Architecture, which later became a School. He later became Dean of the College of Fine Arts and continued as director of the School. The curriculum in architecture was revised completely and other important changes were made; at this time freehand drawing and design, history and theory of architecture, and structural systems, subjects which had formerly been studied in other divisions of the university, were brought into the School of Architecture and devoted exclusively to its students. Instead of studying the structure of bridges, for example, in a class with civil engineers, students now studied the structure of buildings in a class made up entirely of architects. Another major concept introduced by Dean Dillenback was that the fifth year should be one of transition from school to practice. In particular, the practice problem and the thesis, each depending on a fusion of design, construction, and mechanical equipment, force the senior to use his initiative and to apply everything he has learned during the preceding four years to an individual job. The entry into professional practice after graduation has been well prepared.

The idea of accreditation took some time to germinate. For some time the Association of Collegiate Schools of Architecture (ACSA) had functioned as a unifying agency without any attempt to regulate its members, but in 1930 it secured a grant from the Carnegie Corporation to make a study of methods and standards of architectural education. This constituted a first step toward accreditation but final action was not taken until the mid 1940's with the formation of the National Architectural Accrediting Board (NAAB). It gave equal representation to the ACSA, the American Institute of Architects (AIA) and the National Council of Architectural Registration Boards (NCARB). Accredited schools are re-examined at five-year intervals, or at shorter intervals, in some cases. The NAAB has done much to encourage higher standards but it has been unable entirely to avoid adopting the average as a safe objective. It is difficult to achieve balance between experience and experimentation. One cannot be certain that the system will prove to be flexible enough to meet the needs of changing times; at least the NAAB is aware of the danger of becoming "frozen" and is trying to avoid it.

In recent years there have been strong indications that five years in college are not enough to prepare a student for architecture. For one thing, an ever-increasing number of people attend college, raising the level of education among the general public. The professional man must be educated as well as others, and in addition he must learn his specialty, which has become increasingly demanding. Since D. Kenneth Sargent became Dean of the School of Architecture in 1959 this problem has been attacked in two ways: the development of graduate programs -- preferably for students with several years of practical experience -- and introduction of a six-year option in collaboration with the College of Liberal Arts. Those who elect the six-year combined degree pro-

gram receive an additional year of liberal subjects chosen from science, mathematics, philosophy, history, language and comparable fields. Since its inception the six-year program has gained wide acceptance and gives every indication of becoming the normal program at Syracuse. The following table offers a comparison between this curriculum and earlier ones.

Enrollment in architecture at Syracuse has always been relatively small. After the beginning years it remained between 20 and 30, rising to about 40 by the 1930's. Naturally, times of war and depression brought about fluctuations. By 1940 there were about 70 students but the advent of World War II quickly reduced the number to 20. After the war an influx of veterans raised the enrollment to about 150, approximately the present undergraduate total, which is maintained as a matter of policy. Graduate students in architecture, and especially in regional planning, now number 15 or 20.

A few personal conclusions about architectural education in the United States may be permitted. Generally studies have reflected the aims and standards of the whole profession, ocassionally leading and sometimes following. The last several decades, however, have brought changes of a more revolutionary nature than is commonly recognized. The profession of architecture and the schools have increasingly admitted to positions of leadership men oriented toward promotional and sensational, but superficial, ideals. Standards of architecture have become confused; fashionable "heroes" have received wide acclaim and attracted flocks of impressionable young men who have not had time to develop the maturity of judgement needed to distinguish theory (talk) from substantial and responsible achievement. This confusion comes at a time when gigantic building programs are anticipated -- programs of a scale to challenge a profession in full health. I fear that things will get worse before they get better.

	1873 (4 yrs)	1925 (4 yrs)	1963 (6 yrs)
Arch. Design, Drawing, Theory	23%	42%	32%
Freehand Drawing, Painting	19%	11%	6%
Mathematics, Construction	17%	19%	19%
Science	7%	1%	4%
Foreign Languages	17%	7%	-
English	-	4%	6%
History	7%	-	-
History of Architecture, Art	4%	10%	10%
Other academic subjects	6%	-	7%
Electives	-	-	11%
Mechanical Equipment	-	3%	3%
Specifications, Office Administration	-	3%	3%

OBSERVATIONS ON ARCHITECTURAL EDUCATION

prof. david a. dobereiner

The following remarks are based more on experience than reading. They are impressions arising mainly from seven years teaching architectural design in American universities on the part of an English trained Architect. They do not attempt to present a coherent philosophy of teaching.

The first general point is that education is a matter of developing skill in certain kinds of mental processes. The memorizing of information has very little to do with it. The whole difficulty of teaching arises out of the obscurity of these processes. We cannot, for example, observe a students mind whilst he is arriving at design decisions. We cannot directly observe activity in the mind of a genius, though we may spend rewarding hours gleaning clues from his sketches. We cannot fully even understand, analize, or observe the order of our own chain of decisions in design, because every time we try to record it we break it, and it is much too complex to memorize.

Yet the design process is the vital esence in the constitution of the architect. A completely logical, simple, orderly and easily repeatable process will enable the designer who has mastered it to reliably produce a solution to any design problem which will itself also exhibit just those same qualities. Such a man earns the esteem of the client and user, is a worthy and productive member of society, and may even evoke one small cheer from his colleagues. His work, however, is neither that of genius, nor expressive of his personality and, unless he has a developed taste or an unconscious sense of style, it may be almost oppressively dull.

The design process of the ideal architect includes another element which transcends the purely logical and can be described as the "imaginative leap." This phenomenon seems to be partly born of that intuition which consists of unconscious reasoning, so brilliantly described by Henri Poincar'e. It seems to enable the mind to take a great leap into the unknown and land at a point close to where the logical chain would have lead had many years been available for its sure footed progress. This quality is probably never experienced in anything like its pure form by most of us. It is hard to describe and cannot be instilled by teaching. We may as individuals try to cultivate it but it can have nothing to do with an architectural curriculum. Perhaps it is only this element that makes architecture an art, and not just the resolution of a formula. Even so, in any school that actually claims to teach something, its evident presence in a student's work should never be allowed to exonerate him from practising the more laborious but essential procedures adopted by the less gifted majority. For, without strong intellectual discipline, even the truly inspired idea can never be realized. It is still "1% inspiration and 99% perspiration" even for the genius.

The next point concerns the relationship between these two elements in the design process that I have called "the logical chain" and "the imaginative leap." We will agree that architecture is not all logic, but alas! the student is more often inclined to believe that it is all "leap." In reality, the work of the great masters, whilst it is certainly not all logic, is very nearly all logic. The

reason for our strong emotions when we experience a great building such as "Falling Waters," is not because it was great emotion that alone brought it into being, but because the quality of the intuition and the power of the original concept were strong enough to permeate all the subsequent and equally essential reasoning.

There is a logical reason for every design decision that was made here. There is also an aesthetic justification, but neither the one nor the other could stand alone. If we analized the percentage of time in which Wright's mind was involved with (a) a blinding flash of inspiration and (b) ordinary reasoning I suspect it would be in the order of (a) .001 and (b) 99.999. The "imaginative leap" is literally an essence directing the line of thought but not distorting it. Though essential it cannot substitute for thinking. All the thinking is illuminated by the concept, and through thought it becomes realized.

In the design process of lesser men, of whom students are only some, the fault lies in fixing too early on a feeble concept, and subsequently weakening both concept and the chain of logic by further "imaginative leaps" at a stage in the process which should be pure realization. In a word, we keep "changing our minds." It is not that we set too great store by our intuition, personal feelings, inspiration, call it what you will, but that we neither concentrate it nor apply it at the right stage in the design process.

Ideally the process of design consists of four separate stages:

(1) Program analysis (function)
(2) Concept (basic idea)
(3) Realization (detailed idea)
(4) Implementation (building)

Actually, when faced with a new problem most of us embark on a reckless and feverish war with it in which elements of each stage whirl around in our minds until, out of exhaustion or the arrival of a due date, we simply stop and sign our name. The student is then judged on whatever appears on that final board. From the more or less carefully considered remarks of the jury and the fixing of a grade; he is then expected to deduce by some miraculous feat of self-analysis where he went wrong. Is this really the best way to teach?

Since we cannot observe the process directly we can only judge it by the evidence. This could be in the form of model, graphic and verbal expression, presented and evaluated throughout the whole process. The more thoroughly we could order the process the more we could really help the student, particularly the weak student, to see a way of proceeding. Obviously, design concepts will be weak until the student matures, but at least the result might always come near to being a functioning solution, not a pathetic product of the general confusion.

Lastly, the design process has been referred to as if it were the only important result of architectural education, because I believe that to be the case. The design of building elements such as structure, services, wall panels, etc. are sub-categories of the whole design and are therefore subject to the overall concept. Specialized courses in such systems provide vital data for the realization phase of design. For each system the logical process is followed. Indeed an architect could treat his whole life and every act of volition he ever makes as a design decision based on a spark of inspiration, however small, followed by a logical chain of reasoning.

ARCHITECTURAL EDUCATION

robert l. widdicombe

Because I wish to communicate on a meaningful level with people who range from the idealist and intuitive to the pragmatic and empirical, I think we should examine the nature of man. Let us start with man's existence.

Rene Descartes, in order to formulate his philosophy, divorced his mind of all its impressions and starting from a basis that he considered beyond question, erected his concept of the nature of the universe. His starting point was an expression of self conciousness, a "proof" of being. "Cogito ergo sum" (I think, therefore I am).

Now if we look closely at man through the eyes of great thinkers from Socrates to John Dewey, we can divide man into two categories. One includes the man who conceives the universe as an extension of his own consciousness. This man, as Plato said, must realize himself and strive for a good life by going beyond the narrowness of his ego and submit voluntarily to the laws of Being. In the other category are men who believe the universe to have an absolute and ideal existence more real than that known to mans' senses.

This man perfects himself through increasing insights into the essence of the universe. Now since it is obvious that both views of the universe require realization and perfection attributed to one category or the other, we must find further distinction of a more specific nature.

Let us first argue that man's reason must be rooted in nature, and look to the difference between Plato and Aristotle, his pupil. Plato believed that fundamental ordering and unifying forces must exist in the universe. And these forces, in a way which is beyond explaination, must be reflected in our minds; they render us capable of realizing means and interrelations within the mass of our impressions and a feeling of transcendent harmony between our lives and the psychic forces of the universe. Without these pervasive energies we could not have the inspiring consciousness of freedom and creative spontaneity; we would not be "men thinking" but either mechanical automations or bewildered animals.

Aristotle learned to understand the inner purposes of reality through thoughtful action, wise experimenting and observation through science, and, most of all, through contemplation.

For Plato, ideas point at a transcendent reality. For Aristotle they point in that direction also, but their primary function is that of forming and ordering principles imminent in reality as it lies concrete before men.

Here are tow great thinkers of the past who strove to comprehend the nature of the universe and man. We might think of them as climbing the same mountain from opposite sides. They both arrive at the summit but have choosen differing paths have had differing experiences and recollections when they arrive. If you will remember the sameness of their goal, I will try to show the difference in these two categories of man more sharply.

From Aristotle's approach came men like Sir Francis Bacon and John Dewey. From Plato walk men like Jean Jacques Rousseau and Ralph Waldo Emerson. Aristotle's approach was empirical and pragmatic. Plato's approach was intuitive and idealistic.

Now that I have reduced the nature of man into two types expressed by the words pragmatic and idealistic, I assert that it is the very nature of life to strive to continue in being. Since this continuance can be secured only by constant renewals, life is a self renewing process. What nutrition and reproduction are to the physiological life, education is to the social life.

Because I am firmly convinced that one must understand the nature of man before attempting to educate him, I have given you a rough idea of his nature. Now in reference to education itself I will quote some of the past thinkers who have touched on this subject.

Plato said that a human being must know how to transform his intentions into reality. Therefore, growing insight into the nature of life ought to serve as a motivating power in the education of man.

John Amos Comenius said that the aim of education is to develop principles which help man to achieve physical and mental health, to prolong his life, and find the universal conditions of teaching and learning which guarantee facility, thoroughness, conciseness, and rapidity in both intellectual and moral education. Furthermore, he said that education has three main tasks: Erudition which aims at mans' reason, Moral Education which aims at mans' character and independence, Piety which aims at his understanding of God.

Ralph Waldo Emerson addressed himself to man by saying "the man who renounces himself, comes to himself." He addressed himself to philosophy by saying, "the advantage of ideal theory over the popular faith is this, that it presents the world in precisely that view which is most desirable to the mind." To teachers he had this to say:

1. Possess a great idea.
2. Respect the pupil, respect yourself.
3. There must be drill and discipline.
4. Education needs enthusiasm.
5. Even if you have to "lower your flag" keep it flying. If you have to limit because of limitations of your pupils or yourself, do not resort to cheap material, the literature of all great nations contains works understandable by the humblest normal human minds.
6. Even little things can be made significant and transparent if you reveal their place in the greater order of the human and divine cosmos.
7. Help make society such that it will regard its schools as but a small part of its total and general educational responsibilities.

John Dewey has said that "education is a process performed of the people, by the people, and for the people." Further, that education is a process of living and not a preparation for future living.

Other than factual information that is peculiar to architecture, education for the man studying to be an architect should be no different than that of any other kind of endeavor. However, I wish to tie some of the philosophy to architecture specifically.

Let us examine the Platonic concept of the Greek word aret'e. Aret'e is a term for worth or virtue. It demands not only moral convictions, good intentions, and a moral conscience but also the ability of adequate and practical action. A weapon, a plow, and a house have aret'e if they are fitted to serve the purpose for which they have been created. They must have a proper structure, their effect must not be impeded by unnecessary trifles and they must show the highest degree of adequateness to their total purpose. A modern architect who strives to mold into one unity structure, proportions, appearance, and purpose, comes very close to the Platonic concept of aret'e.

The instruments through which man perceives his environment are the senses. But sensing or perceiving, in order to be transformed into a somewhat lasting experience needs both memory and the power of conception. If a person's memory, senses, and

conceptual powers are sufficiently matured, he cannot help but wonder at the colorful and changing world around him. He also feels the necessity of mastering this world as much as possible. For, only in that way can he survive and achieve what we are all longing for, namely, inner balance and productivity.

So man possesses two powerful motivating forces for his development; curiousity and the desire for inner balance and productivity. Without them his potential strength, which nature has given him in the form of energy would lie fallow. With them, he pursues his tasks with perseverance. He tries to expand his contact with men and the world. He learns because he delights in knowing and with his increase of knowledge there comes an increase of interest in new experiences.

Learning, therefore, is a never-ending process of growth. The task which is incumbent on the educator is to observe the psychological as well as the ethical conditions of his charge's constitution in order to help him find his way from infancy toward intellectual and moral maturity. To wit, this means his way and not everybody's way; for only a person who knows his individual strength and limitations is able to develop adequately while growing and learning. In other words, only the educator deserves that name who leads his pupil to discover where and of what kind are his own creative powers and thus help him in his endeavor to become a living form.

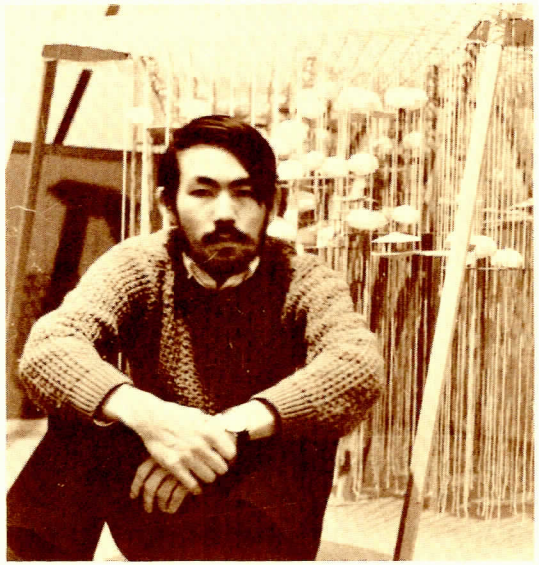
Civilization in order to survive, needs not only knowledge of facts, and methods, it needs also rational concepts about the principles which govern, or ought to govern society. It is education which has to transmit this wisdom from one generation to the other and to help youth take its place in the great workshop of history. This is the reason why every great philosopher is interested not only in schools, children, and methods of teaching but also in broad philosophical and social problems. This is also the reason why a free and wise society must expect the educator to point courageously at the faults from which it suffers, and to seek remedies for them.

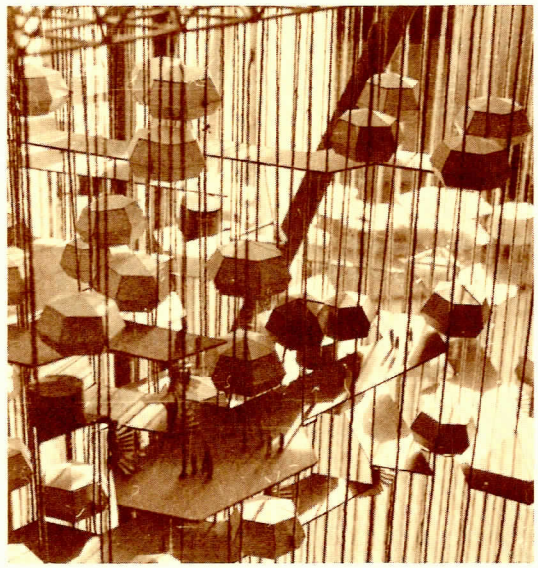
MAXIMUM CITY

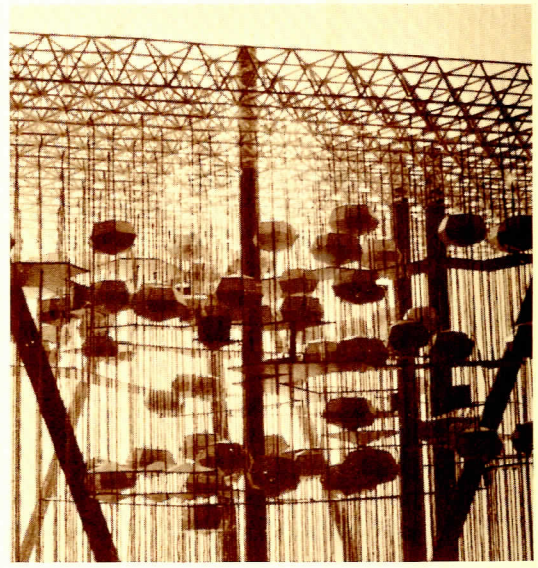
chikafusa sato

It is generally agreed that when we think of housing or city planning, it is not enough to consider function and beauty alone, we must first think of what sort of life is ideal. It seems to me, however, nonsense to consider what kind of life should be the best. This doesn't mean I gave up asking questions about life. My approach in this project is not from the point of view of the individual, but rather of the society. The city for society is not the same as the city for human beings. However, the city which is well designed for society (cities full of greenery, without traffic confusion or slums, having perfect sanitation, and so on) becomes the city for human beings. This is not because society provides what the members want, but because man doesn't know what he wants and he feels that the provisions of society are what he naturally wanted.

Today, everyone with a few exceptions (the so-called "social drop") hates slums where living has few demands, and likes clean and healthy homes which require so much attention to keep clean. This is not because they like purity for its own sake, but be-





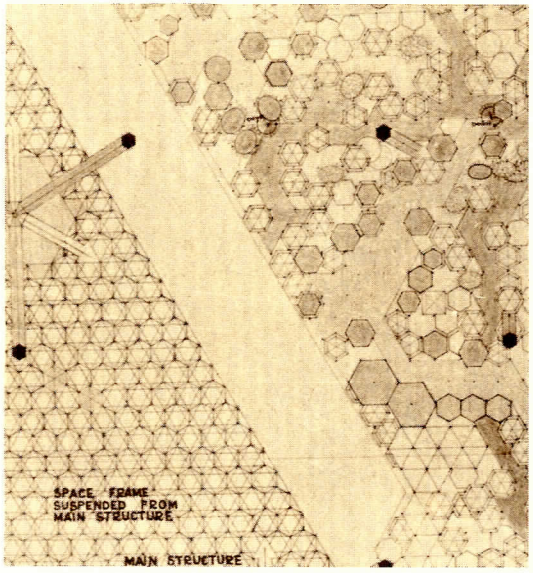


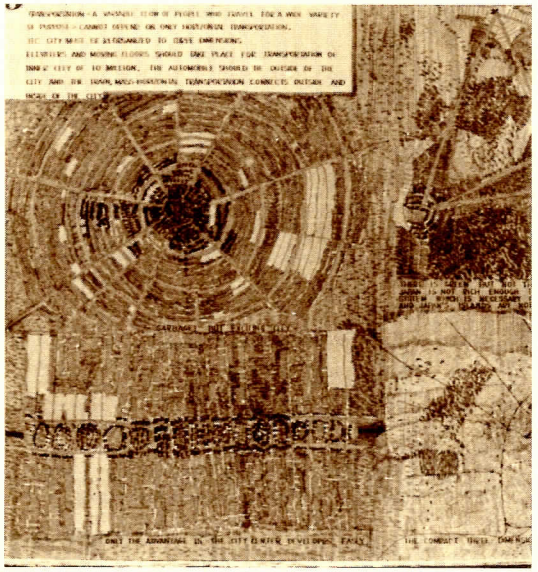
cause to like purity is an essential requirement for people to be members of society. Good members of society do not think they want to live in slums because if they did, they would not be considered good members of society. They think they hate slums and they do not want to live in them. The reason why my approach is from the social point of view is simply because I don't know what the individual wants and what the ideal life is for him.

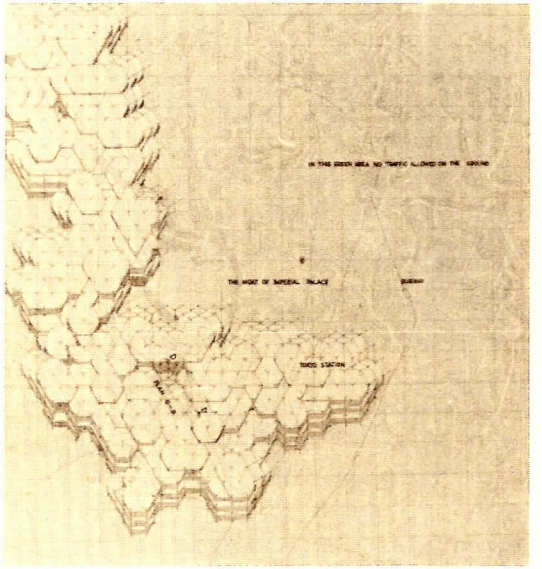
On this basis, the outline of this project is this: in order to avoid the inconvenience of every-day travel for commuters, the traffic confusion of commuting, congestion in the central city, the inadequacy of sewerage and water works, the shortage of public parks, the dirty air, and so on, I propose a compact, three-dimensional city of 6.1 cubic miles in which ten million people can live above their offices or factories, or under their schools. All prefabricated plastic living, office, school, industrial (except heavy industry), and commercial units are suspended by cables from space frame decks which are hung on reinforced concrete main structures. Residents can easily change living units or move with them. The city can grow easily and rapidly without any limitation and with a minimum of change in the natural setting. Thus the city is given flexibility.

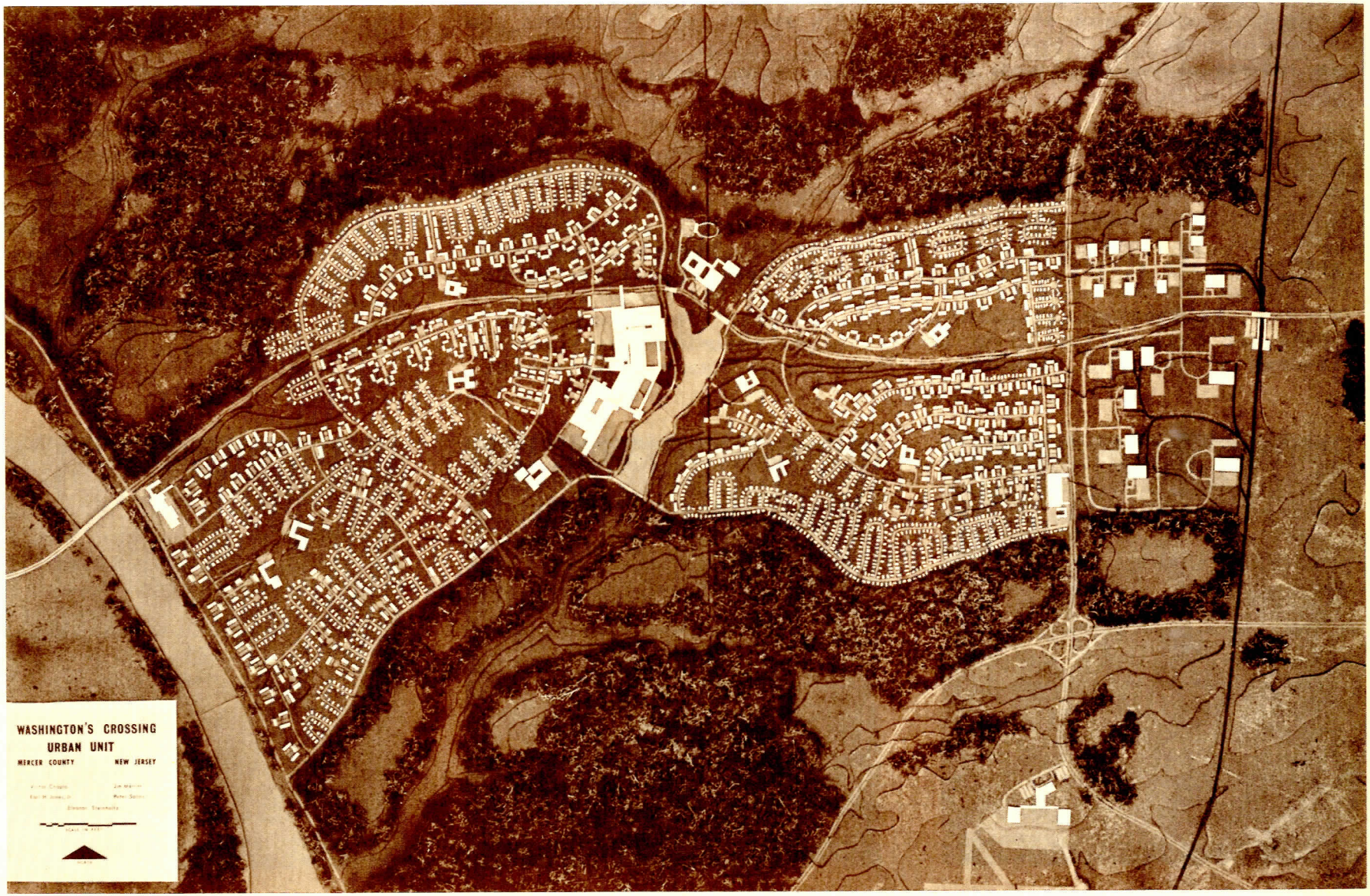
In the city, inhabitants own their living units which are composed of bath and bed space, some with a kitchen. The living unit is enough to provide living space for one person but not enough for two. In case individuals want to live together, these units can be connected. Otherwise they live alone, apart from their families. When they can take care of themselves (at six years of age) they do not have to see their families if they do not wish. This destruction of the family system is an extreme proposal for individualism. I don't think, however, that the family or society is consistent with individualism.

I believe that man is worthy neither of individualism nor of freedom. The individualism or freedom, however, is the last CARROT which is hung from a bar, tied to a thill of a cart, pulled by a donkey. The hopeless efforts of the donkey to eat the carrot makes the cart advance. For the donkey, the effort is absurd. . . .








WASHINGTON'S CROSSING
URBAN UNIT
MERCER COUNTY
NEW JERSEY

A MODEST PROPOSAL

peter salins

"Megalopolis" has become a household word. It has come to define those vast metropolitan agglomerations in which practically all of America's cities and towns are located. These endless urban oceans from the edges of America; creeping along the Atlantic from Boston to Miami and along the Pacific from Seattle to San Diego, connecting all the Great Lakes from New York to Wisconsin and hugging the Gulf of Mexico from Texas to Florida. The Atlantic and Great Lakes "megalopoli" already touch here in the Erie Canal Valley forming one super megalopolis of 70 million people.

Megalopolis is a tentacular growth oozing out from our larger cities along whatever traffic arteries it finds convenient, engulfing and transforming all existing settlements in its path; turning what were once high speed roadways into jazzy mobile shopping malls and necessitating, as a result, the network of expressways which now bear the real burden of easy movement around and through our urban areas.

At the moment this expanding urban tissue has no shape, no character, no structure save that which natural barriers and the above-mentioned expressways introduce into it. Since megalopolis is here to stay it is the responsibility of architects and planners to bring some order out of all this chaos.

What is needed is an articulation of the metropolitan ooze into clearly defined cellular units of varying but fixed size with all new growth taking place, as it does in living tissue, through the addition of cellular increments and not by unchecked cell expansion. The matrix of these cells would be supplied by nature, with a helping hand from man; farms and forests, hills and lakes would form a continuous "green belt" around our urban cells inserting breathing space and structure into the metropolitan fabric.

To make this vision of honeycombed urbanity a reality would require planning on a breathless scale. Whole cells (i.e., towns) would have to be designed at a time and the cellular matrix would have to be set aside years in advance. No organizational or political framework exists in the United States to make any of this happen--but there may in time--and in the meanwhile it is the architect's and planner's job to do society's dreaming.

One component of such a reordered urban environment does have a precedent, however: the "city at one blow," the "new town." Ever since Ebenezer Howard proposed his "Garden Cities" the small self-contained city, built all in one piece, has become a widely accepted, if not that frequently constructed, cure for the syndromes of overextensive urbanization. The most recent American prototypes of the New Town idea were the "Greenbelt" towns of the New Deal. It does not really matter that there were only three "Greenbelt" towns built, that each one accommodated less than 10,000 people, that the integrity of their greenbelts has not been preserved. The idea and the precedent are there for a more venturesome America to adapt and expand into the cellular city concept of the future.

It was to design just such an urban cell for Megalopolis that a team of five planning students got to-

gether last fall. The problem in this case was to project an urban unit into the vast East Coast Megalopolis at a suitable location where both the requirements for a self-contained community and integration with the metropolitan area could be met. Chosen, finally, was a long narrow strip of rolling New Jersey countryside, stretching from the banks of the Delaware River, exactly where Washington made his famous crossing, to the gravel bed of the Reading Railroad, Northeast of Scranton and Philadelphia and Southwest of New York--in other words, in the heart of the Boston-Washington corridor.

Forty-five thousand people were to live in this micro-city of 2 square miles (quite a high density) buffered by a river, a railroad, and generous half-mile wide strips of green. All the industry and commerce requisite to making a nominally self-sufficient community were to be on hand; otherwise, the urban cell would be just another suburb feeding on the chaos next door. The 45,000 citizens of Washington's Crossing, as the place came to be named, would fill all age and income categories and consequently would live in every type of domicile from high rise apartment to single family house.

Without going into the details of the final design--since it is only concepts with which we want to deal here--it might be well to mention some of the problems and alternatives that faced this heterogeneously grounded group of planners--(two architects, two economists, and a social scientist); whether to scatter the industrial and commercial facilities or to concentrate and isolate them; whether to rigidly segregate the vehicular and pedestrian traffic, either horizontally with the "Radburn" system or vertically; whether to juxtapose different housing types or not; whether to orient the town toward the main natural attraction, the river, and risk incoherence or to face inward and turn one's back on a great view; but most important of all, whether to aim for the structure and intensity of a real "city" or the leisurely sprawl of a suburban town.

How these problems were resolved in this particular instance is not important. What is important is that within a new framework of total community design we would have an opportunity to actually develop an urban philosophy and put it into practice.

THREE ESSAYS

john carter

air conditioning

I would like to question the assumptions that make the provision of complete central air conditioning desirable in buildings we are designing. Admittedly, positive control of the atmosphere has its place in laboratories and other places where technical activities are going on; but in buildings of more general use, and especially in our homes, it is really beneficial? I believe that Le Corbusier's definition of the house as a "machine for living" is coming true in a way he never really expected -- as an incubator.

Complete conditioning merely eliminates atmosphere as a factor in our environment, whereas in nature atmosphere by its varied means creates a dynamic environment that is stimulating to us and a universal topic of interest. Consider the following:

History shows that man is most active and society is most progressive in the temperate latitudes, where climate varies from fairly hot to fairly cold and from fairly wet to fairly dry.

The enjoyability of a summer home or camp lies largely in that, unlike the winter home, it is not climatized, but is open to the changes of the weather.

I hold that in the future home air conditioning should be less rigidly predetermined but more flexible, with properly controlled penetration of outside air conditions. Such provisions would create a more natural and stimulating environment.

development housing

Contained in a recent issue of LOOK Magazine was this quote by William Levitt, the development builder: "I'm not just selling houses, I'm selling a way of life." (It would be interesting to hear Mr. Levitt publicly elucidate the virtues of this way of life he is selling.) LOOK slyly squelches this first quote with one by a Levitt home owner: "One day I suppose I'll sit down and figure out everything I'd want in a house, but right now I couldn't afford it.

The inference I get is that development builders are doing their utmost to promote that favorite American pastime - wasteful consumption. Young American families are being conditioned to require their own new home, which they may buy, use, and throw away like any other merchandise. These home-buyers are willing to forego any great desire for a beautiful or well-planned environment, convincing themselves that they at present have neither the time nor money to obtain anything better.

It is going to be interesting to see how greatly man's resources are used to better his environment. Supposedly, he will soon have time to figure out what he wants in his house (to para-phrase the original quote) and the money to afford it as well. There will in the future be less and less excuse for the sterility present in our new housing environment today.

car design

Architects can learn much by studying American automobile design. There are many disillusioned critics on the subject who unanimously deplore America's lack of taste, but they perhaps underrate the importance of one fact: automobile manufacturers are concerned with selling cars, not with enhancing the beauty of the world.

In order to sell the most cars the car manufacturers have catered to a primal animal urge in man -- the need to exercise power.

There has been the gradual increase of horsepower, so that a driver can pull away from the rest of the world at a stoplight, or can sneer at speed limits on the rare occurrence of an open road. There is the fantasyland of the dashboard, emulating the complexity of an airplane's control panel, where, upon any reasonable excuse, new gadgets are added for the driver to mastermind. Cars have grown more ridiculously oversized, after all, what man wouldn't rather pilot a yacht than an outboard? Finally, there is the advent of seatbelts, which reassure the driver that he is safety-minded and justify his going out in quest of greater speed records and other death-defying feats.

The exterior design of cars has been consistent with the trend towards greater power. The 20-1/2-ft long flanks of Cadillac's 1960 models ("the standard of the world") are molded to resemble rockets, complete with exhaust openings 6" in diameter. Other makes employ tail sections inspired by bombers, air intakes like those on jet fighters, and wrap-around windshields that resemble a cockpit. Designers of all models are consumed with the idea that a car must display its imposing power and speed even when standing in a parking lot - "the forward look." In this quest cars become steadily longer and lower to the willing discomfort of its jet-age occupants.

It is very likely that functionally and economically the Model T was the best car ever produced in America. It was inexpensive, durable, and dependable. The owner himself could perform most repairs with a simple set of tools that came with the car. Compared to a modern car, the Model T possessed greater visibility, superior ease of entry and seating comfort, and better maneuverability in traffic because of its compact size. All this and it was built to last 3 to 4 times as long as any American car today except the unpopular Checker. Henry Ford stubbornly kept his cars sensible when competitors started stressing speed and streamlining, and nearly went bankrupt as a result.

Architects can benefit from a realization of this situation, as it shows the damage that can result from being guided by economic determinants. If architecture is to be recognized as an art form it must not allow itself to be controlled by the entrepreneur, whose main interest usually lies in selling buildings and who thus has few qualms if this necessitates the prostitution of intelligent design to suit the simple wants of potential clients.

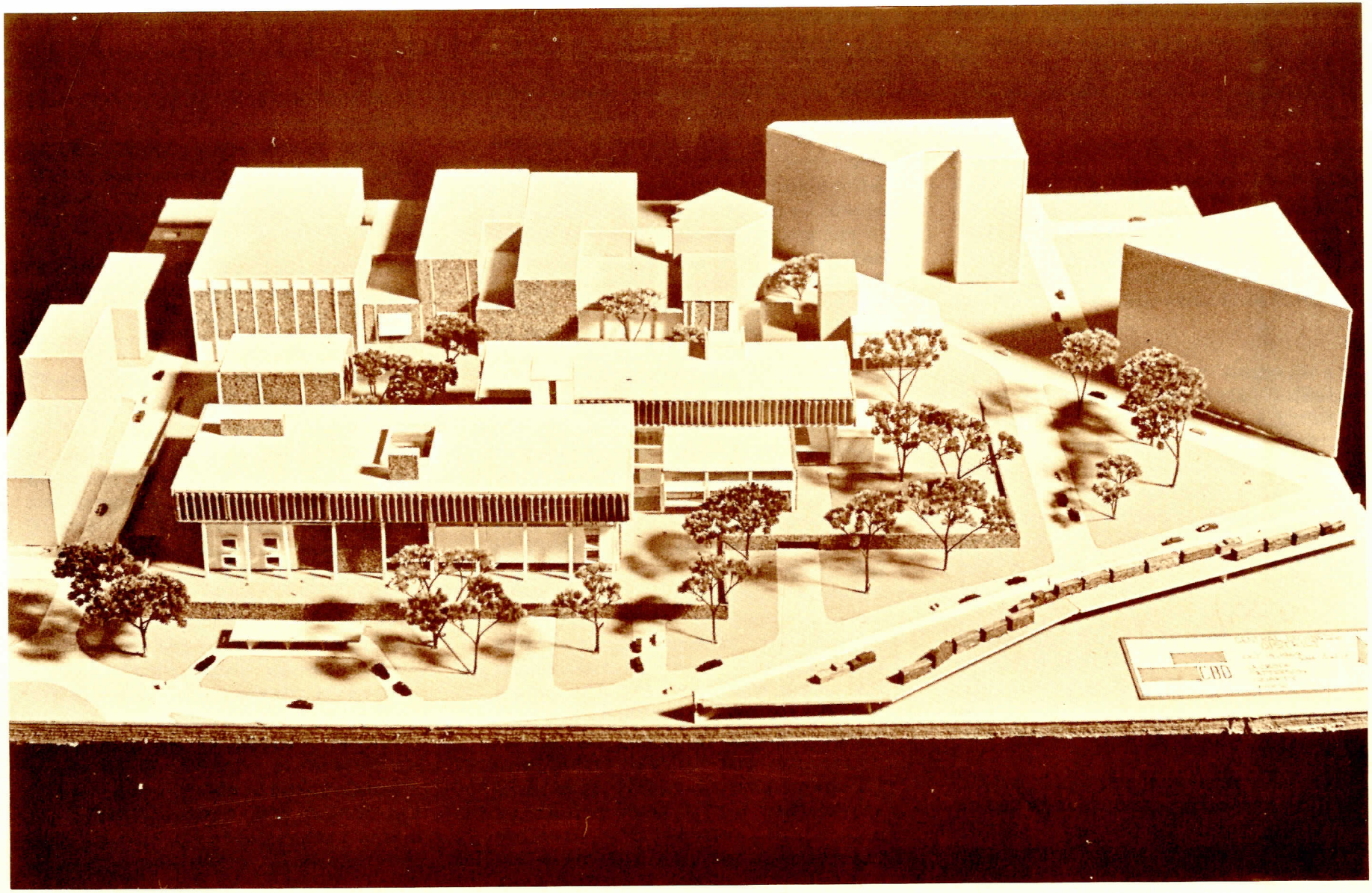
A refreshing experience is a visit to Saarinen's new colleges at Yale. Two years old then, they however appeared much older, their gray stone blending perfectly with the surrounding Gothic structures.

These colleges offer some lessons to other architects, I feel. First, they demonstrate a treatment in pedestrian scale that is possible but rare in work today. In cases such as this where an architect realizes freedom of form and arrangement are present, a true sculptural quality can result.

Second, Saarinen shows that modern buildings don't have to appear shiny and new, but that natural materials used correctly age much more gracefully.

Third, this project hopefully will influence dormitory design in the future away from the cell block type and into more creative forms.

STUDENT DESIGN PROJECTS



SENIOR PRACTICE THESIS

richard la croix

The first phase of the senior practice thesis, a Central Business district for Syracuse, New York, was studied individually. Each student within a ten day period, had to make a statement of development for the proposed super block. After five such proposals were selected, it became a group project with four students on a team.

The original concept of this solution was simple. Two main buildings on a spacious mall; parking underground. Each building was divided into nine large bays. The stores were grouped at many different levels, some forming closed masses and others forming circulation levels. The center bay of each building was used for vertical and horizontal circulation for each separate level. At the top of each building were two levels of offices, which overhung all sides of the building. The main street of Syracuse, South Salina Street, was closed off creating an even larger pedestrian mall.

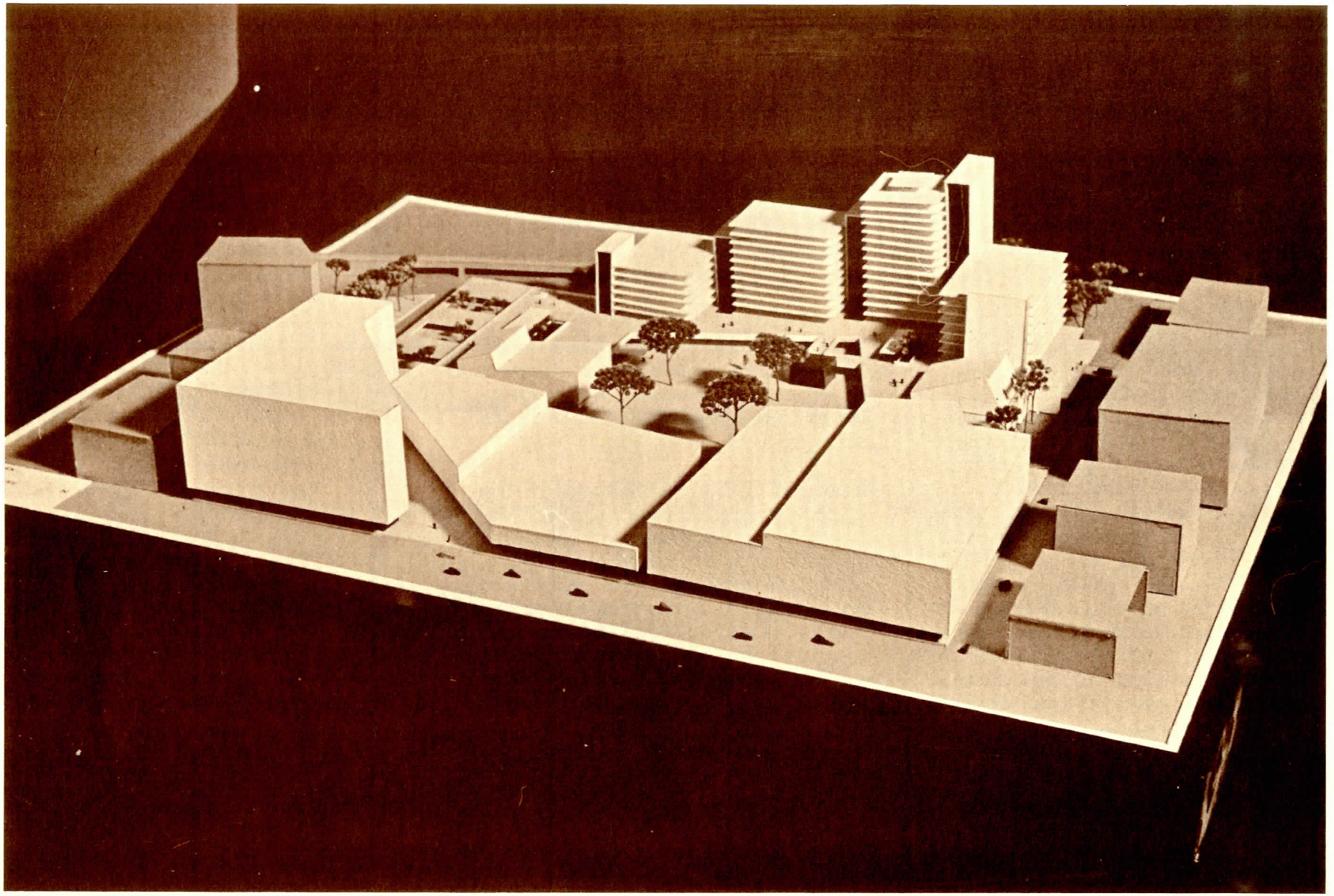
After the four man group was formed, the problem had to be restudied to make the refinements necessary to bring the project more in the realm of possibility. There were both scale problems and circulation problems in the hurried ten-day solution.

It was decided to make the simple two building solution even simpler by making it one building, allowing the irregular site to dictate its overall form.

It seemed reasonable to allow the building to keep its original two-part form and connect them in such a way as to allow ease of circulation both vertically and horizontally. A core of elevators and escalators connected the two-forms at the center portion where each overlapped. On both sides of this core horizontal circulation levels connected each floor of each form with the other.

The layout of the building itself consisted of two long interior corridor malls, forty feet wide, with a second level balcony over half of this mall connecting and bridging across the second level stores. At each end of each mall was situated a "magnet" store which would tend to draw people past the smaller stores. A small theater was also used as an upper floor magnet. The highest of the commercial levels became an exclusive restaurant overlooking the exterior mall. Above the entire commercial area were, again, two levels of offices.

The remaining stores of the adjoining super block were also redesigned to make them a part of the mall. The design of the mall itself was oriented toward the north, where the other stores of the city are situated, and where future growth would take place.



The scope of this problem is basic to most urban communities of the 20th century. A group of business leaders and merchants of Syracuse had decided to form a corporation to overcome a shift in civic and residential facilities from the central business district to "brand new" plazas and centers. This corporation, now controlling the entire city block between Jefferson and Onondaga, and Salina and Clinton Streets, commissioned a firm of architects to present preliminary plans for development of this block.

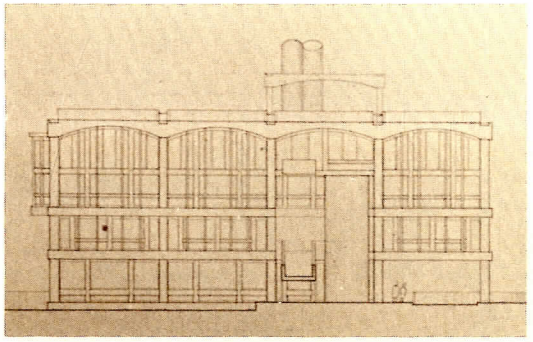
The primary elements in such a solution should include a simple, comprehensive integration of building masses together with verticle and horizontal circulation, landscaping, and the automobile. New business facilities must accomodate various types of purchasers: the all-day browser, the employee-shopper, and the last-minute buyer. The solution must maintain an essential identity and a readily recognizable form. This undertaking should not only reflect the uniqueness of its urban location but indulge in a contribution of significance to the total urban pattern and also its regional implications.

The solution became two-fold: a) to destroy the visual wind tunnel existing with a gridded street pattern, and b) to create a civic identity incorporating narrow, angular fingers which terminate in a large quiet space for civic activity both during the day and at night. Building masses must become secondary to the pedestrian's awareness of constantly changing vistas and experiences. The automobile becomes packed away beneath the central space. Vertical circulation within the building cores quickly transports the shopper to his desired destination.

The architectural philosophy then can be interpreted as integrity, which is the deepest quality in a building. It is this quality within, and of, the ordered structure which inevitably evolves its beauty. The creative act is two-fold. A designer must be concerned with a tasteful interpretation of his creative impulse, strongly coupled with a spatially scaled functional solution. Sight of either should not be lost at any time. A work of art must evolve from integration, ordered selection, and structural elements inherent to its form.

TRADES BUILDING

richard crandall



The problem: to develop a given scheme into an articulate architectural language, to turn a building into a piece of architecture.

An architectural language must possess an order of its own, one which clearly suits the program, and thus makes sense (i. e., says something). Once a language is developed, it must be spoken in such a way that the observer is shown the idea. In reality, this language is developed as it is spoken for solutions come only in answer to problems.

In this instance, the program is for a building trades and contractors association building to be used primarily by contractors for studying working drawings as well as for receptions and lectures. The first function is assigned to the ground floor and the others to the third and mezzanine levels, with offices and a reference library between. Receptions may spill out onto the roof garden.

A logical vocabulary is developed: bearing walls of brick, pierced as necessary; concrete floor salbs, also used in combination with bruck (as paving); and wood for partitions and mullions. Glass provides a sense of enclosure without restricting the eye. Scored concrete and wood strips on the walls and ceiling point out relationships by emphasizing the basic organization. This language becomes articulate once the conflict between the means of expression and the idea to be expressed is eliminated. This process is the quest for logic.

The observer is led through the building and thus experiences it. Pedestrians may either take the ramp to the second level or pass under it, following the walk under the covered entrance way to the main doors or through to the garden at the rear. Those arriving by car follow the drive around the turn and under the covered entry way before parking. This reveals the front elevation, the side, and give a glimpse of the garden. Once in the lobby, one may take the stairs or elevator to other levels, go into the garden, or go straight to the drafting room. The progression through spaces is emphasized by the conflict of movement with the direction of the bearing walls.

From the reception area, one may move into the lecture room or up a set of circular stairs to a mezzanine which overlooks the lecture room and the reception area. The stairs continue to the roof garden which is partially covered to provide a transition to the outside and a frame for the view into the garden below.

A successful language is one which communicates. Clarity comes from a sense of rightness. The underlying order must be so logical and so natural, that only the perceptive observer will notice it. Each element should be so right that the majority would never realize that any other solution might have been used. The paradox here is that the most ideal solution becomes the most practical.

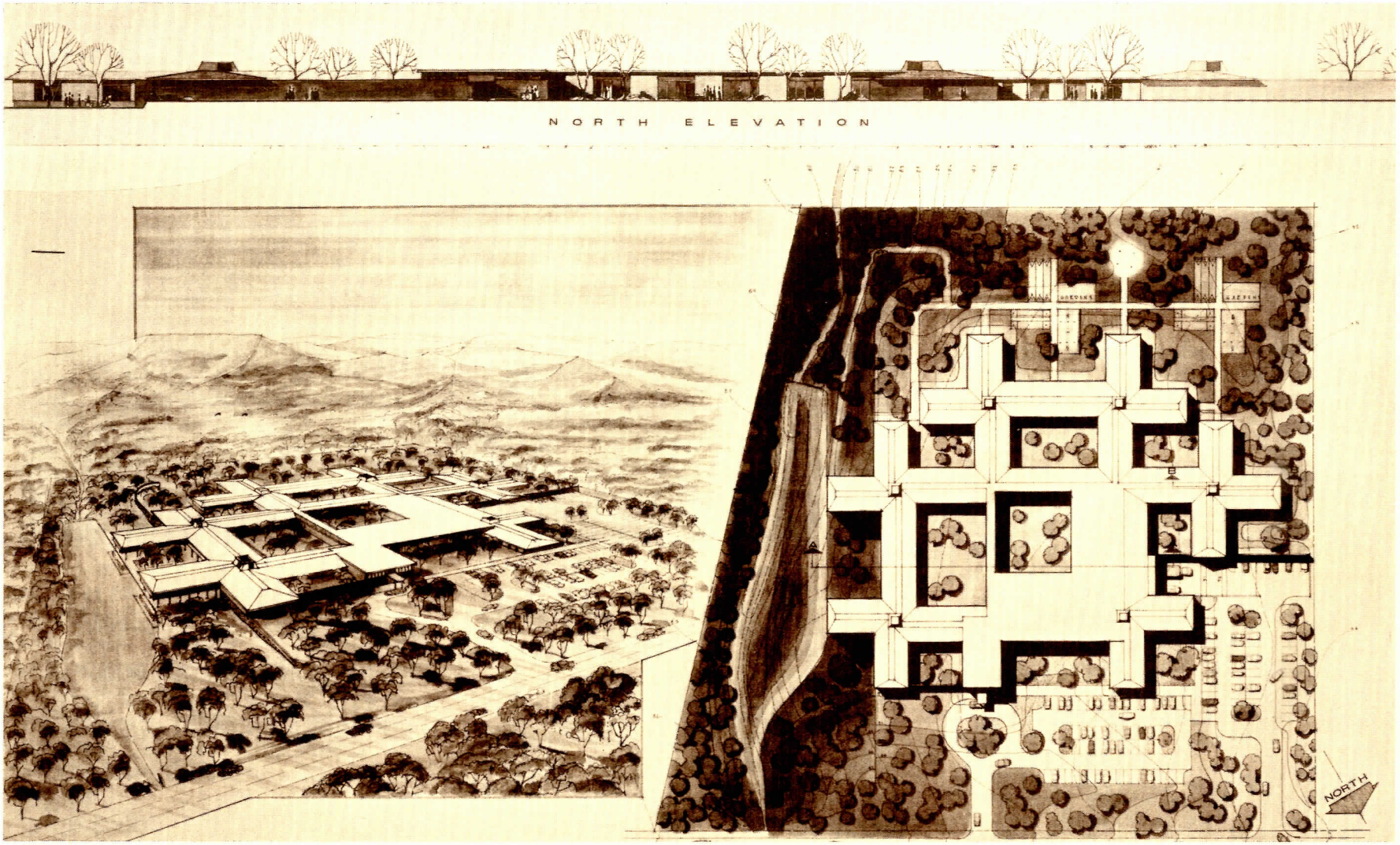
A NURSING HOME
clark shaughnessy

A design problem is best started by developing its program. Next, one should establish the basic aims. Planning then begins with functional and spatial relationships explored through plan and section. Finally comes the detailing which gives expression to the basic massing.

A nursing home has many unique requirements. The primary one being medical treatment of patients not requiring hospitalization. Secondly, to provide a home-like atmosphere which improves the attitude of the patients. This in turn enhances his possibility of recovery.

By creating an intimate neighborhood of one story row houses with generous lawns for recreation and relaxation you have established a basic "hominess." Living quarters are kept personal with one-, two-, or four-bed rooms. This also allows privacy of treatment. The one level design is easiest for the lame and the elderly which includes most of the residents. To avoid the constant reminder of death for the more healthy, it is best to isolate the more severe cases or to keep them as a separate group. Central treatment rooms are integrated into the 50-bed row house sections. The most prominent part of each section is the dining - indoor recreation area. This is also the area for receiving visitors. Every sector focuses on an outdoor court. While the focal point of the whole grouping is the surrounding countryside. The residents may wander to this free, open space to walk, fish, garden, play lawn games, think, or daydream.

The major consideration in a nursing home becomes that of providing a pleasant environment for unfortunate people, many of which will spend the remainder of their lives there. To design sensitively for this situation requires a high regard for living, as the major function of the nursing home.


NORTH ELEVATION
NORTH

A NURSING HOME

john g. colby

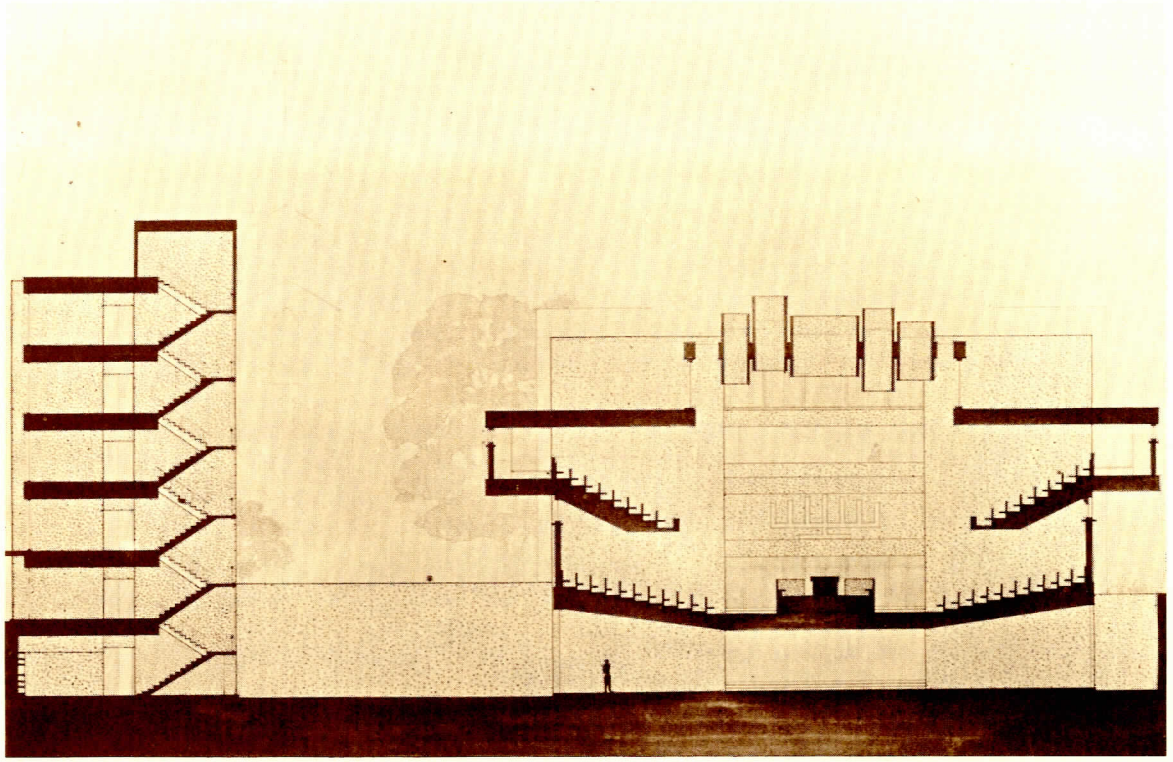
On a rolling five-acre site in Southern New Jersey, a hypothetical client had obtained a feasibility permit for a 248-bed nursing home. Herein lay the basis of the first of eight visiting critic design problems given to the fourth-year class. The one-month project was given under the guidance of Caleb Hornbostel, New York architect and author.

The presently rising incomes, life expectancy, and state of health of our senior citizens as well as the greater availability of public funds financially facilitating new construction are among the factors giving rise to a new wave of nursing home construction. Rehabilitative facilities both indoors and outdoors are essential to the well-being of the elderly and play an important role in promoting an active life. A happy, healthful, physical environment leads to a pleasant psychological one and makes the "nursing institution" a "nursing home."

The modern nursing home is of a highly complex and multi-functional nature, demanding insight into problems from a sociological as well as a physical planning standpoint. Traditionally the nursing home has been characterized by a severly static quality, ignoring changing service and administrative requirements, community reorganization, and demographic trends. There is appearing, however, a new social sensitivity as to the nature and needs of aged and infirm citizens.

The creation of a healthy, normal environment, offering the individual a "home away from home" in which he belongs and can identify, was the difficult task given the fourth year class. The fundamental needs of privacy, ease of mobility, outdoor identification, and service convenience were among the considerations that led to the informal "campus plan" which constituted my solution. Manipulation of planning, light, color, space, and interior-exterior relationships were aimed towards the particular needs of the residents, both private and group-oriented. Five cross-shaped, 50-bed units were created and grouped around outdoor courts. Each was provided with a lounge area and a central service and nursing core. The five units radiated from one end of an area containing general facilities such as a chapel, library, dining rooms, and indoor recreational areas. At the other end of this area were located administrative offices, service facilities, and staff quarters. Outdoor recreational facilities included lawn sports, gardens, sitting areas, and a fishing deck. Parking was provided for 130 cars.

The accompanying illustrations give one solution to a program that lent itself to various approaches. I found the most challenging aspect the creation of a total environment -- from the fundamental elements to the small details. As in all architecture, a complex and challenging design proceedure was the means to an ideal end: the preservation of human dignity and the creation of meaning and interest in life.



A synagogue on Park Avenue in New York City is out of place unless it is created for that specific place. The architectural character of Park Avenue is unique and thus, the form of a synagogue there would be different from one in any other location. A synagogue or a church in New York cannot simply use a Wren spire or a Gothic tower and expect the building to stand out in this setting. The commercial buildings of New York so dwarf synagogues and churches that architecturally, religion becomes insignificant. The synagogue cannot compete in size so why should it try? Rather, it can complete the urban architecture in terms of space. I say complete instead of compete because, architecturally spaces cannot be disregarded. It is easy to deduce that the spaces in a city

A SYNAGOGUE

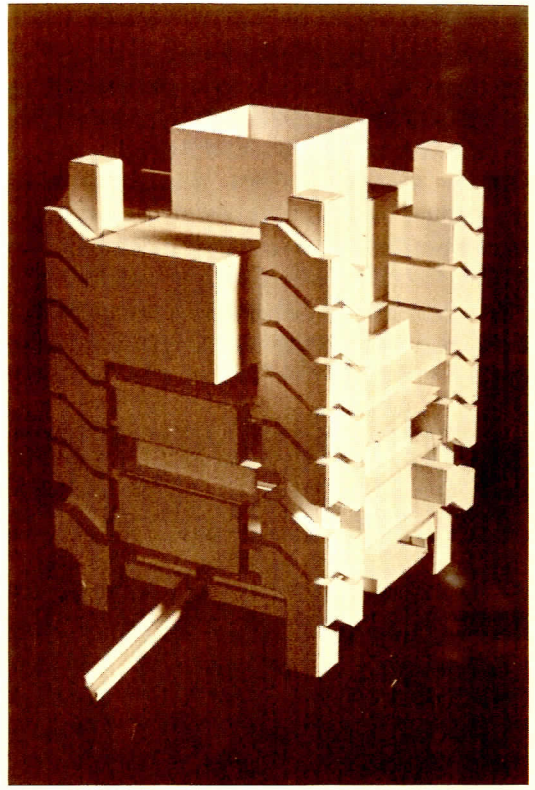
c.j shaughnessy and j.d. bova

best serve and please man if they are arranged in careful relationship. Competitive spaces can either lead to the growth of monstrous, uncomfortable, and therefore useless spaces or to incorrect relationships of function or ceremony. they may deny and thus upset the hierarchy of importance of adjacent spaces. Architectural spaces are social phenomena and derive their spatial definition through satisfying this end rather than through a traditional concept of proportion or circulation.

My objective in the preceding was to introduce reasons to support spatial arrangement and massing of the synagogue, not to develop an abstract theory.

As you look up Park Ave., a narrow corridor between tall buildings, the synagogue site appears as a pleasant interruption in the pattern. It invites you to enter the space. Adjacent to the street corridor is a hoovering mass under which you are drawn and led to the entrance at the rear. Approaching the entrance you realize a large open space. This is definitely a space for congregating. The other required areas are placed in relation to this main area.

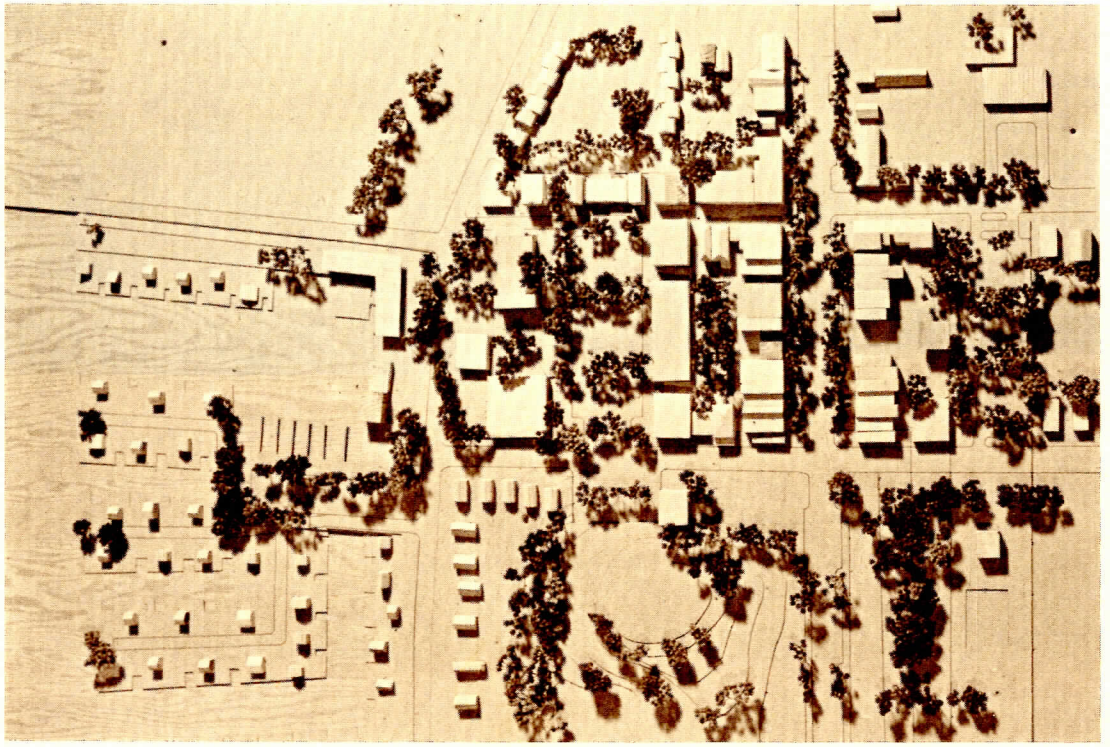
In summary, the synagogue occupies a large space among the uniformly divided spaces of Park Avenue. It retains this oneness of space, which in this case, labels it as a place of assembly, and matches the character of urban architecture.



PALMYRA
eric yaffee

The problem of redeveloping the downtown district of the village of Palmyra, New York involved a good deal of research and several visits to the actual site. Through these studies, we became acquainted with the existing problems and needs of the community along with the future needs for commercial, educational, public, and recreational facilities.

The downtown area we were concerned with centered around Main Street. Most of the stores in this area need alterations which we suggested in our proposal, for we felt it best to leave as many existing buildings as possible. To destory these buildings would only be detrimental to the pleasant small town atmosphere which now exists. The few new buildings which we did proposed were necessary as replacements for those which were either dilapidated or moved because of planning needs.

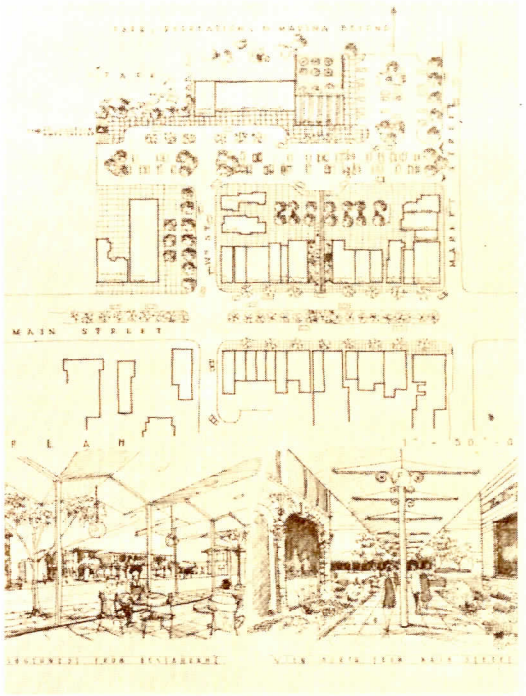


Our solution was specifically based on zoning, separating the commercial and business areas from residential areas. Presently, stores front on both sides of Main Street, with small apartments above. We planned for the relocation of these apartments to an area which was more conducive to a residential atmosphere. In place of the apartments we suggested business offices and small shops. The plan for malls behind the stores on both sides of the street is an attempt to find more of the small town atmosphere through the creation of space related to the scale of the pedestrian.

The marina is made possible by the proximity of the Erie Canal, only a few hundred yards beyond. It is provided with both a boatel and a motel, which would tempt more tourists and vacationers. Adjacent to the marina we have brought in additional small inlets for private lots.

Further to the west is a large public park, next to which we have located a new public library which was badly needed. We felt the two were related in their functions of recreation and relaxation. This was a major characteristic of our design which we tried to follow throughout

PALMYRA
john g. colby

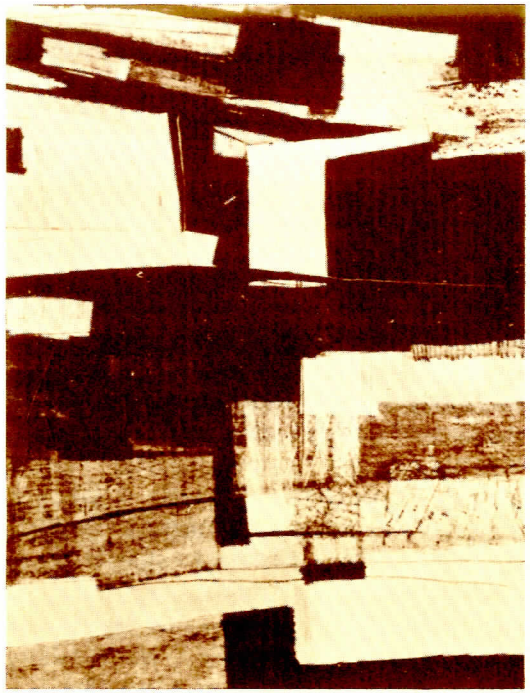


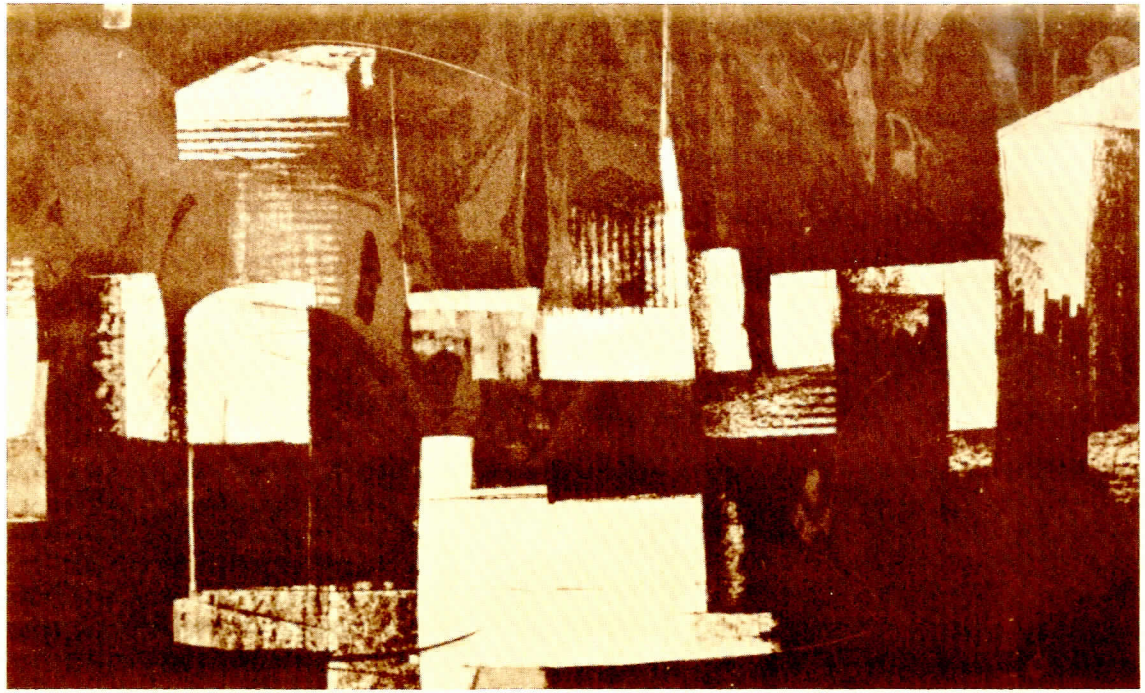
The fifth visiting critic problem for the fourth year class was given by Dr. Hollister Kent, an urban planner in Syracuse. The revitalization program encompassed the central business district of Palmyra, New York, a small village of 3,500, located about twenty miles east of Rochester. After a field trip to Palmyra, the class was divided into four teams. Final design submissions, the form of which was left up to each team, were reached after a formal series of preliminary studies and criticisms. A nine-hour sketch problem, one of which is illustrated, dealt with pedestrian flow and building massing in the central business district.

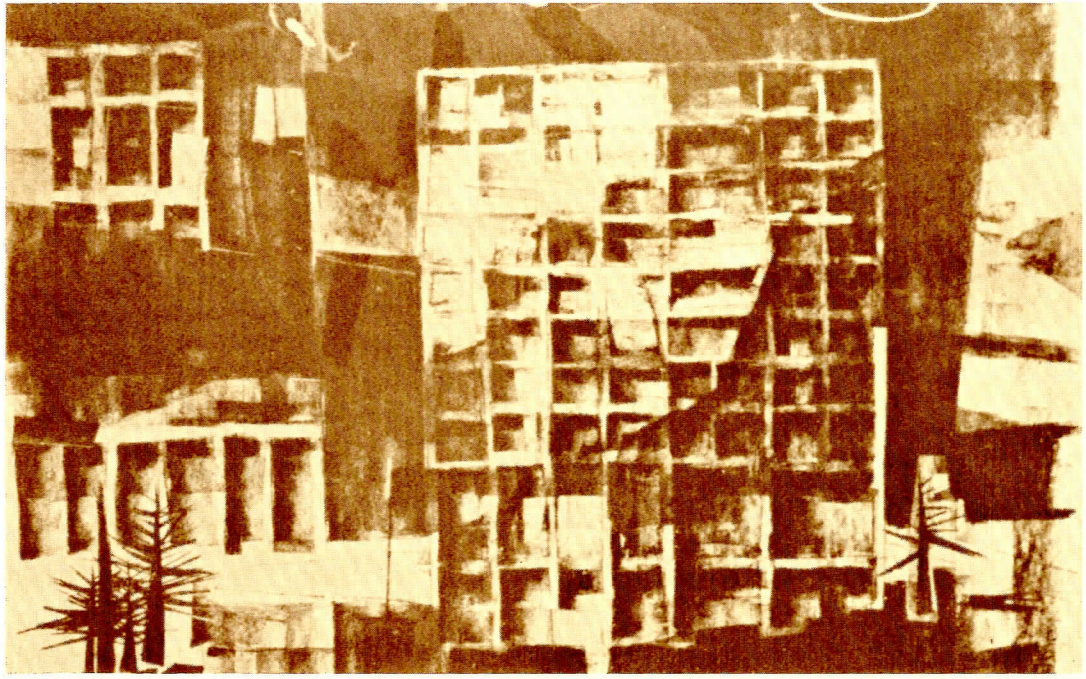
The once thriving village of Palmyra has failed to react to advancing technology and changing social institutions. Buildings erected to serve functions that are now obsolete stand in a state of dilapidation or, at best, makeshift repair. The emergence of rail and vehicular modes f transportation obviated the use of the adjacent Erie Canal as a means of commercial transport, once a major source of Palmyra's economic well-being.

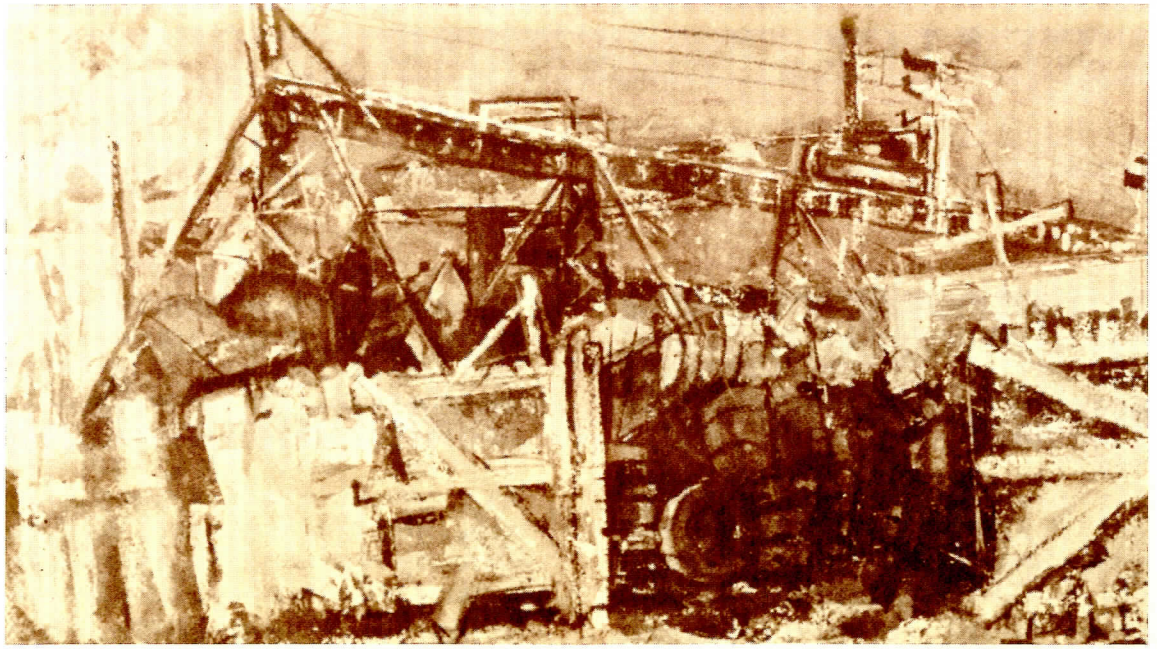
Although the four team's solutions represented a wide range of attitudes towards urban character, several basic design premises were common to all. An effort was made to avail ourselves of the existing advantages and to build Palmyra as an urban attraction, thereby expanding population by encouraging the location of commerce and industry. Proposals were arrived at only after a systematic consideration of every major facet of urban life in Palmyra-governmental, residential, commercial, religious, cultural, educational, and recreational. Also a strong factor in future proposals was the significant influence of Palmyra's once colorful past upon its present social, political, and economic institutions.

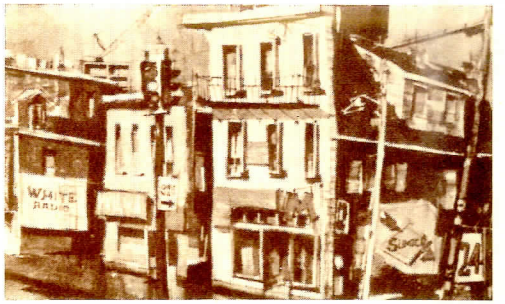
The importance of this project from an educational standpoint was an extension of architectural principles to the broader plane of urban planning, and an awareness of the multi-faceted nature of such an endeavor.

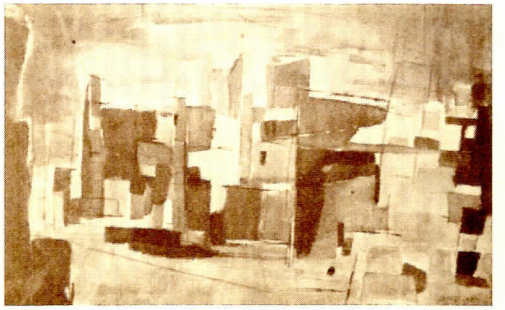


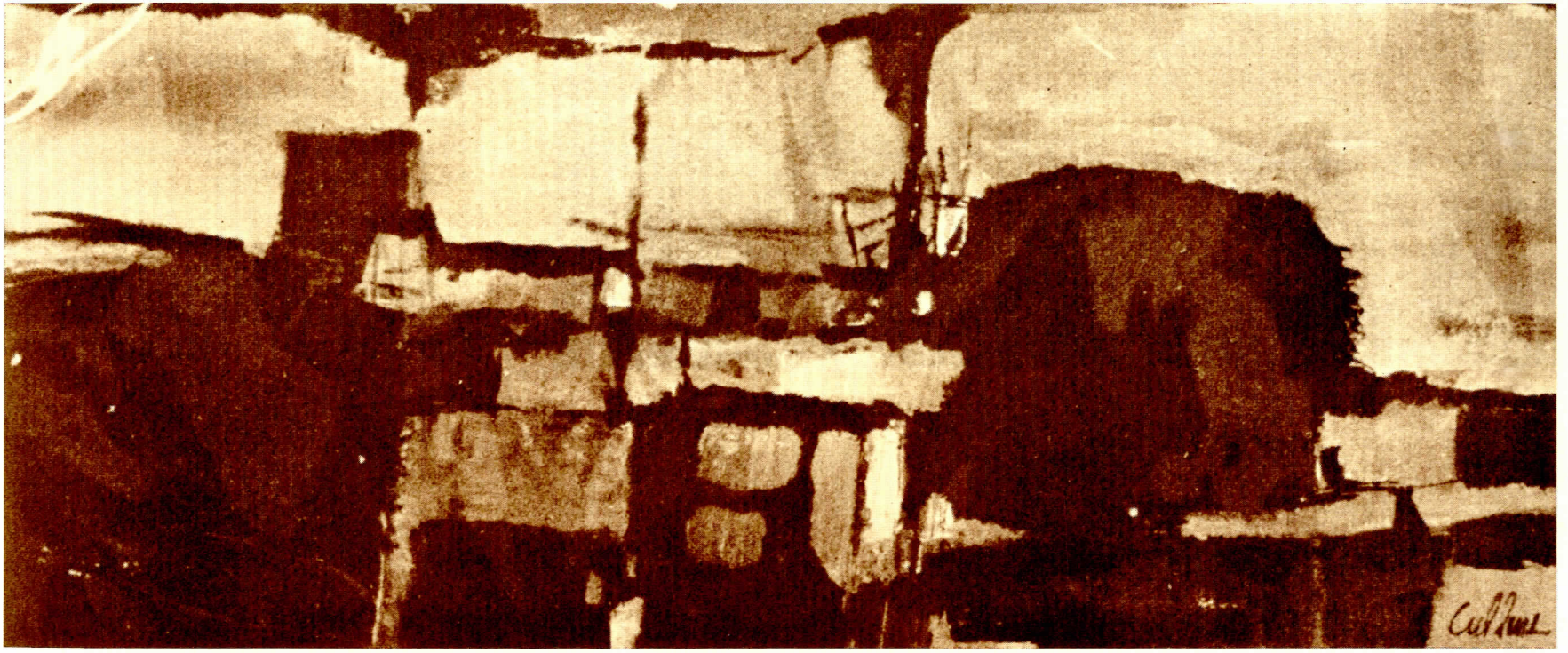












WESTCOTT STREET OFFICE BUILDING

robert m. haley

The second semester of the third year design class has been devoted to the designing of a neighborhood plan. A neighborhood by nature consists of residential housing of many types, commercial uses, service and public facilities, to mention only the obvious elements. An actual site for the project was selected near the university. This allowed for a much more realistic procedure of design. The problems were self-evident in the dilapidated houses, the topographical possibilities, the traffic studies, the sociological barriers, etc., etc.

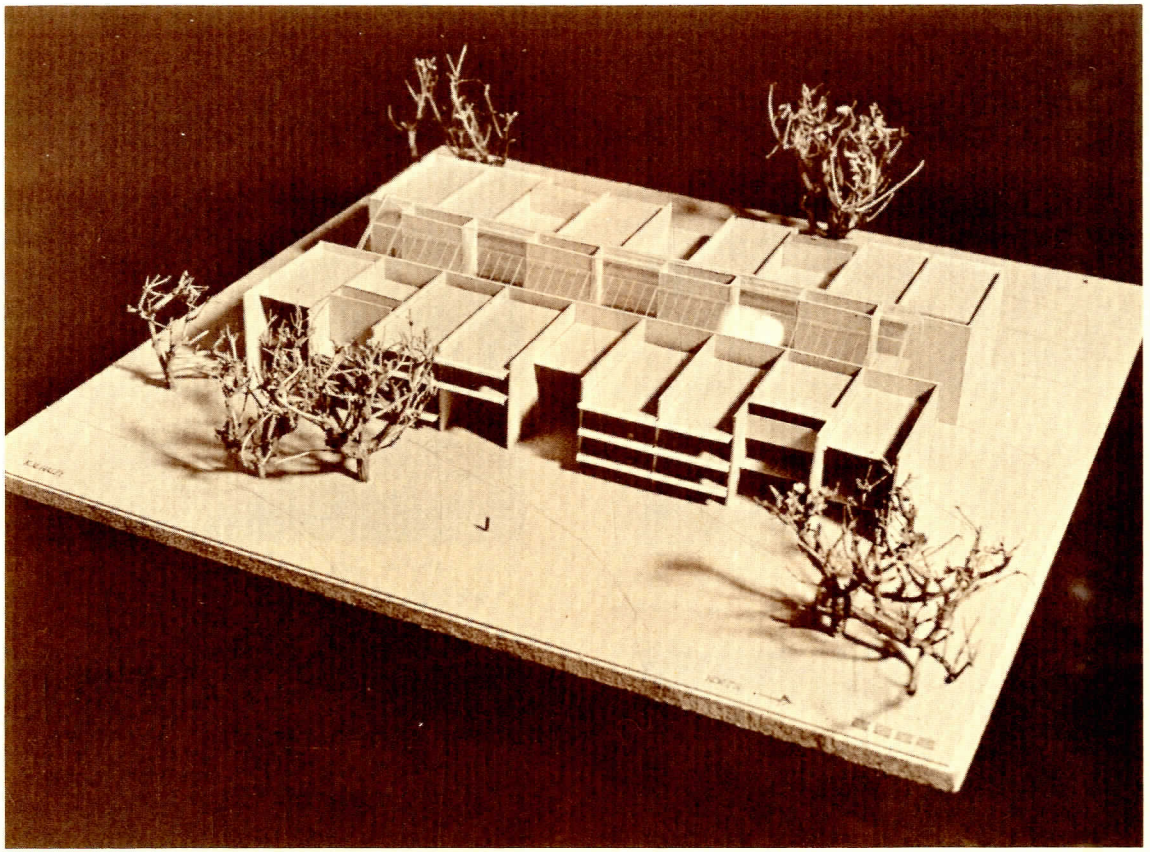
The first step consisted of a two-week study of the Westcott Street neighborhood. The class was divided into six groups. The first group executed a substandard conditions survey and also developed a plan for the rehabilition of existing structures. A second group determined the areas slated for new housing development. This group presented the many possibilities of new housing baised on income studies, old age consideration, etc. The third group studied and proposed a program of development in office and commercial facilities. These studies were baised on the needs of the neighborhood complex as a unit in a larger system. The fourth group was concerned with the problems of land use. In a neighborhood area of this sort, where the elements were planned individually, there is a great deal of unused land. The neighborhood is thus held together by some sort of physical boundaries rather than by planning considerations. The purpose of the fourth group was to present a plan of maximum land use efficiency. Thus considerations of circulation, both vehicular and pedestrian, received their proper importance. The fifth group was to consider the present to the class the outside factors which would affect the Westcott Street neighborhood. This would entail colaboration with the Department of City Planning of Syracuse, as well as Syracuse University plans for development and extension. Other factors which could have an effect on the total plan would be highway proposals, park expansions, school growth, etc. A sixth group built a large model of the neighborhood to be used at a later date. Contour consideration could be more easily visualized through use of this model.

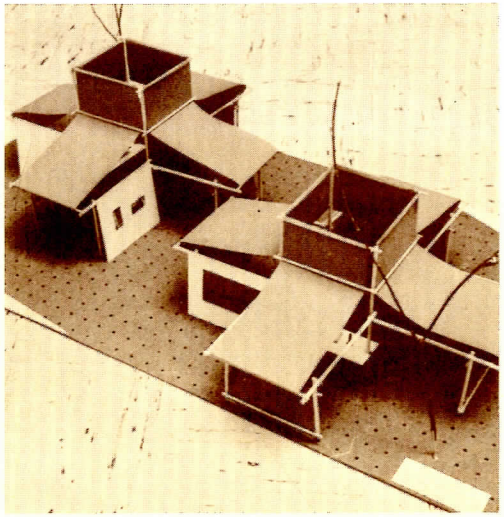
After this familiarization and data collecting period, the office building project was presented. This complex was to house, either conventionally or by some other

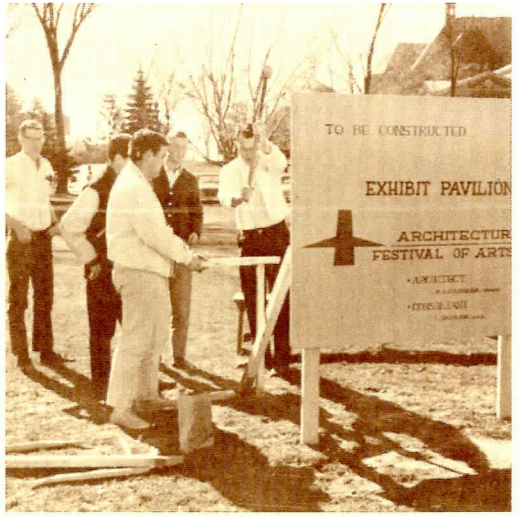
drastic means, the offices of the various professionals in the area. This office complex was to be considered in conjunction with the new Westcott Shopping Center. Yet the character of the entire neighborhood should be considered the predominant design determinant.

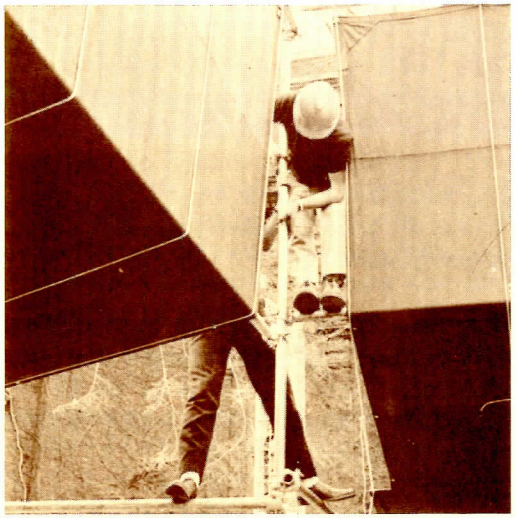
The detailing of the lobby of this office building constituted the next project. This study was to bring the student back to the lobby scale so well loved at S. U.

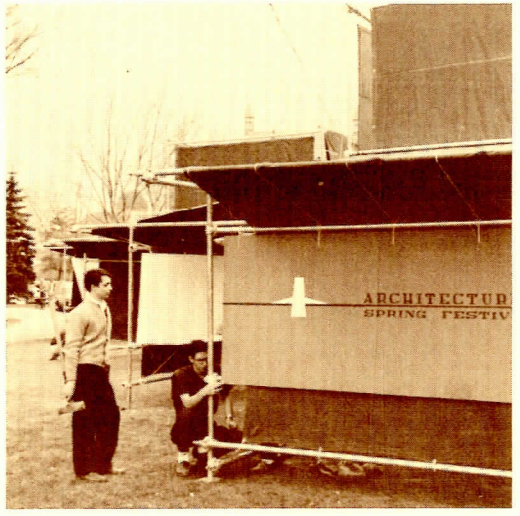
The final phase of this neighborhood plan deals with the complete and detailed design of the new housing area. This project constituted half of the semester's work and again was broken down into separate groups of study for better realization of the problems.






TO BE CONSTRUCTED
EXHIBIT PAVILIÓN
ARCHITECTUR
FESTIVAL OF ARTS




ARCHITECTUR
SPRING FESTIV

ARTS FESTIVAL PAVILION

edward d'andrea

In the spring of last year, the faculty announced that an eighteen-hour sketch competition would be held among the sophomore and lower junior classes for the design of the Architecture Pavilion for the university Festival of the Arts program. The thought of seeing any student project realized at full scale was something exciting to the students. The thought that the School of Architecture might have a chance to proclaim its existence at Syracuse University was even more exciting. For all, the Arts Festival was a hope for a union of the Fine Arts schools and a chance to withdraw from the shell of Slocum Hall. With these thoughts in mind, each student began his design with a natural desire to win but taken up by the spirit of the festival and a thought of something more than just another sketch problem.

The idea of a festival of any kind conjures up the medieval image of blaring trumpets and colorful flags blowing from the tops of tents. Essentially, the idea of a festival today is an ecclectic one. When the problem was presented, there immediately arose the problem of how to create a medieval excitment while maintaining a contemporary expression. I sought to create a high point to draw the eye toward the exhibits' perhaps suggesting the tents with their high masts and flags. At the same time, I did not want to create the lifeless interior of a tent. At the sacrafice of wind and rain, I opened the center to the sky and the sides became not only a system for circulation and display but a source of light and air.

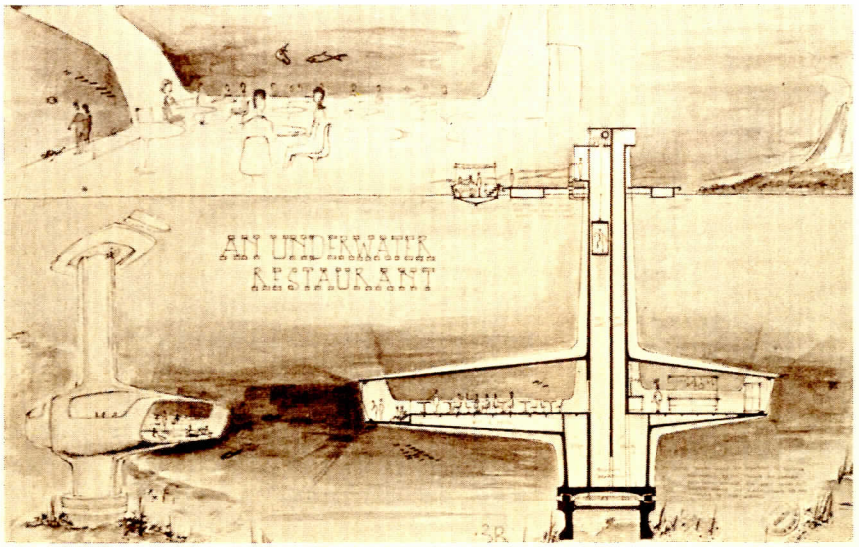
Included in the program were a budget and list of materials to be used. They were: selected widths of canvass and steel pipe, suitable connections for the pipe, and fibre boards for display purposes. Included in the sketch requirements were facilities for exhibiting work from all five years and graduate work, models, and pieces of sculpture.

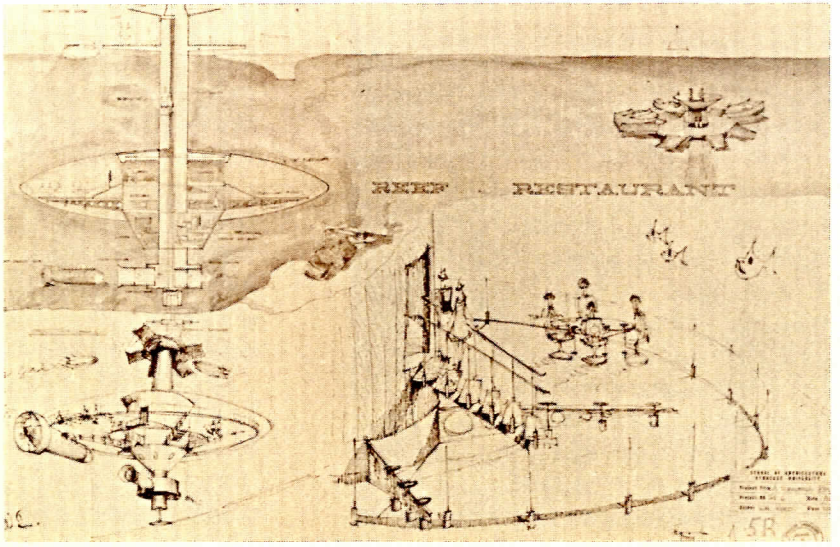
A careful consideration of materials was essential. How to use canvass and poles and not build a tent? The form evolved by weaving the canvass through a framework of steel in an effort to express the rigidity of the steel and the pliability of the canvass. Both fit well into the design concept and I was able to create a tent-like form with a flexible plan to exhibit each year within its own niche. The size of the form was dictated by the scale of the materials and it was found that two would be needed to fulfill the space requirements. Final details and design changes were worked out by a collaborative of several students who had placed high in the competition.

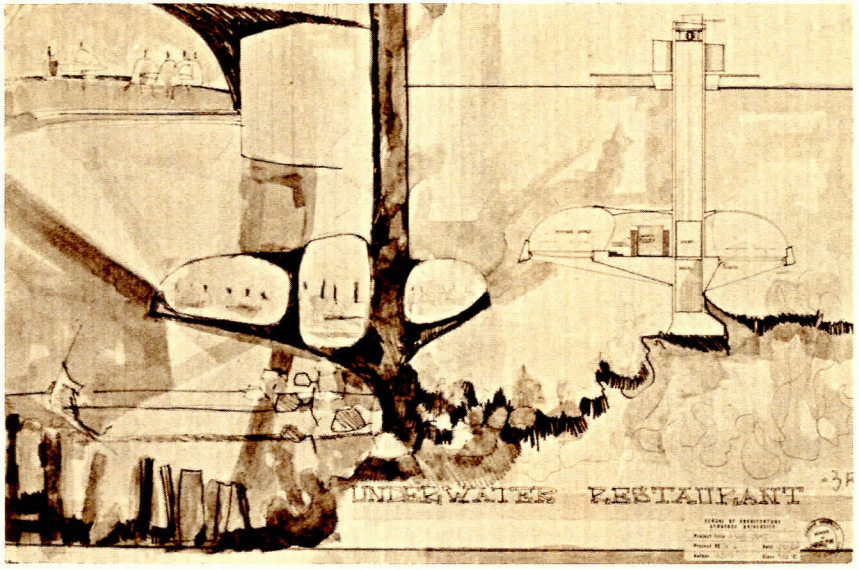
The actual construction of the pavilion was scheduled so as to simulate actual building conditions: the architect, clerk of the works, and the contractor. The classes were divided into committees to handle all facets of construction including publicity and scheduling the actual exhibition of work. Very quickly, a great insight into the complexities and aggravations of the factors of building construction was gained by all. This rpovided a lasting impression for a new kind of background of design and the whole architectural process.

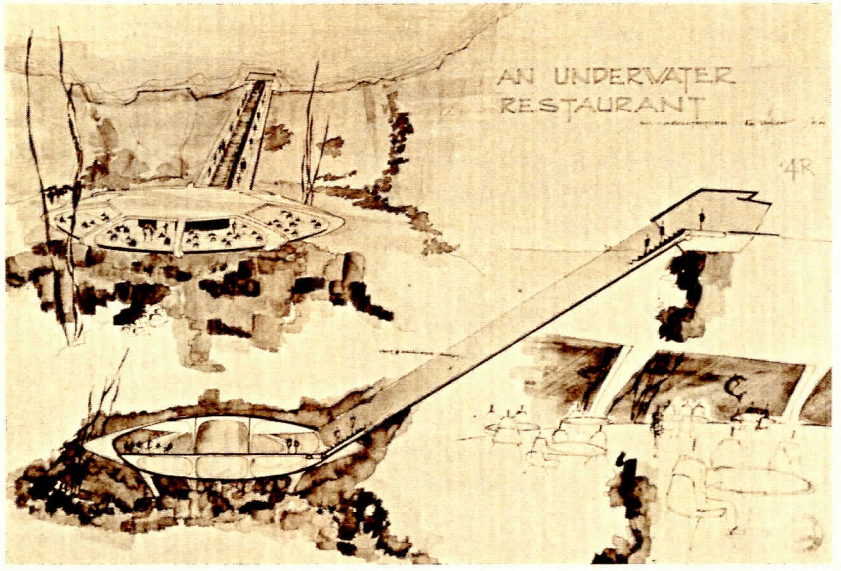
The competition was forgotten when the pavilion stood completed on the quadrangle and each student saw the fulfillment of a united effort. The project was finally realized only through the collaboration, teamwork, and respect for each other's ideas among both the students and faculty.

NINE-HOUR SKETCHES 3rd YEAR







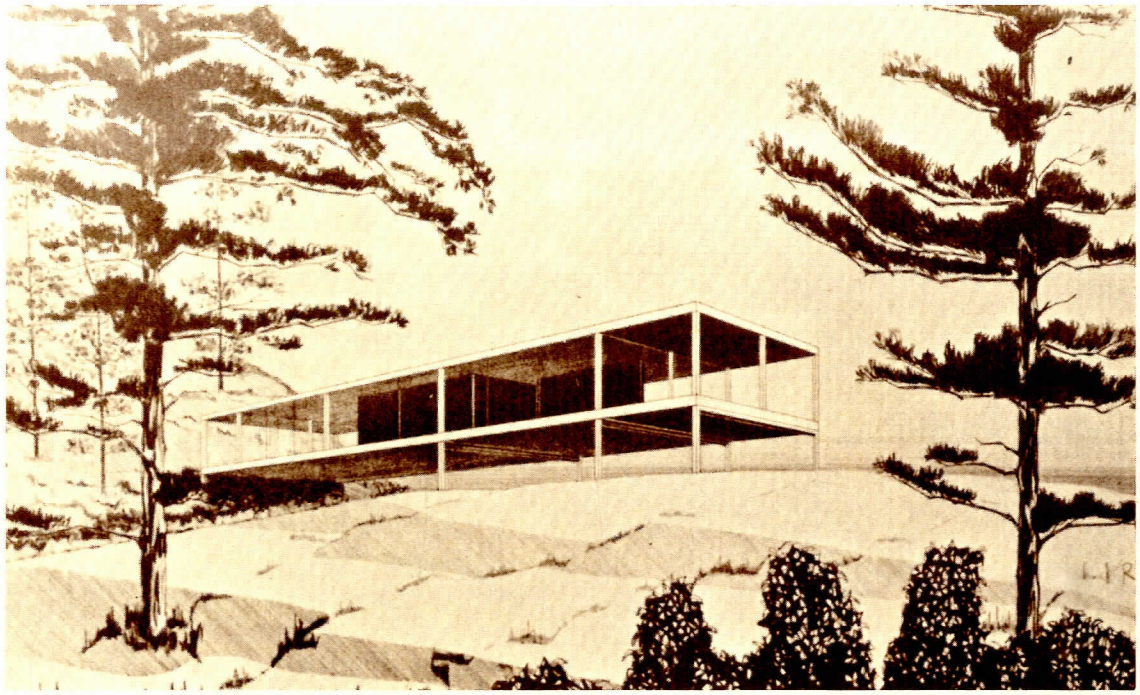


THE HOUSE
steven einhorn

The last project of the Freshman Year design program was an exercise in combining basic design fundamentals stressed throughout the year with more than the previous amount of thought given to function. This problem, entitled "The House," was presented in the form of sections, elevations, and a study model.

This problem was carried into the second year design program and was given as the first project as an exercise in perspective presentation and rendering. The student was required to present his individual scheme in a perspective, using any monochromatic media. The emphasis placed on the problem was on expression of depth by line weight and sheet composition.

The basic idea of my presentation was to enframe the house as naturally and simply as possible and to emphasize the structural quality of the house. This was accomplished by contrasting the three very dark masses in the foreground with the white frame of the house. This focuses the eye on the house. The dark quality of the roof and floor planes also adds to the expression of the white structural elements. By the extreme contrasting of very dark and very light elements, the rendering is given a simple but strong quality.



A SKI PAVILION
robert heins

The major project of the first semester, sophomore year, deals with promotional design. The Hart Ski Company, the second largest manufacturer of metal skis, desires to use a soft-sell approach aquainting the general public with the sport of skiing and therefore promoting the sale of their skis.

The program was divided into two sub-projects: a pavilion for the 1964 World's Fair at Flushing Meadows, New York, and the design of a sports information center on Fifth Avenue, New York City.

As any World's Fair turns out to be an exhibition of the most expensive, gaudy, and pretentious assortment of "buildings," the Hart Ski Pavilion had to reflect some of this character just to compete with the surrounding buildings.

The plan of the pavilion is a cross plan, with an added mezzanine. One fourth of the plan is for service and offices, with display areas occupying the rest. Teletypes, direct line phones to ski areas of the world, maps, photo boards, and pamphlet racks are all part of the exhibit.

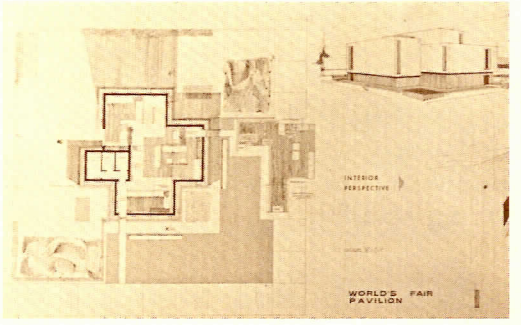
Entrance to the pavilion is at each end of the two main wings. After circulating through the pavilion, exit through the rear to a landscaped rest area is provided, which in turn leads to a subtle exit from the site.

The comfort and luxury of a ski resort was to be stressed without the "Alpine Schmaltz" of an "A-frame" design or associated elements. Use of precast concrete allows for indirect natural lighting through a slight cantilever about the pavilion.

External openings are limited and used only for natural lighting effects, achieved through model study. The festive air of the Fair is left entirely to the colorful displays while the impressive quality of the exterior creates the necessary monumental effect.

As for the center in New York City, the problem was to relate the features of the pavilion to the small scale and size of the center, but still include the basic program requirements of the pavilion. An exterior facade of precast concrete similar to that of the pavilion's was used. Service was limited to the rear of the center, below a part of the mezzanine which partially covers all of the center.

Presentation for the project included plans, sections, model, interior-exterior elevations, and perspectives of both buildings. Use of color was unlimited as well as approved variations on the required drawings.



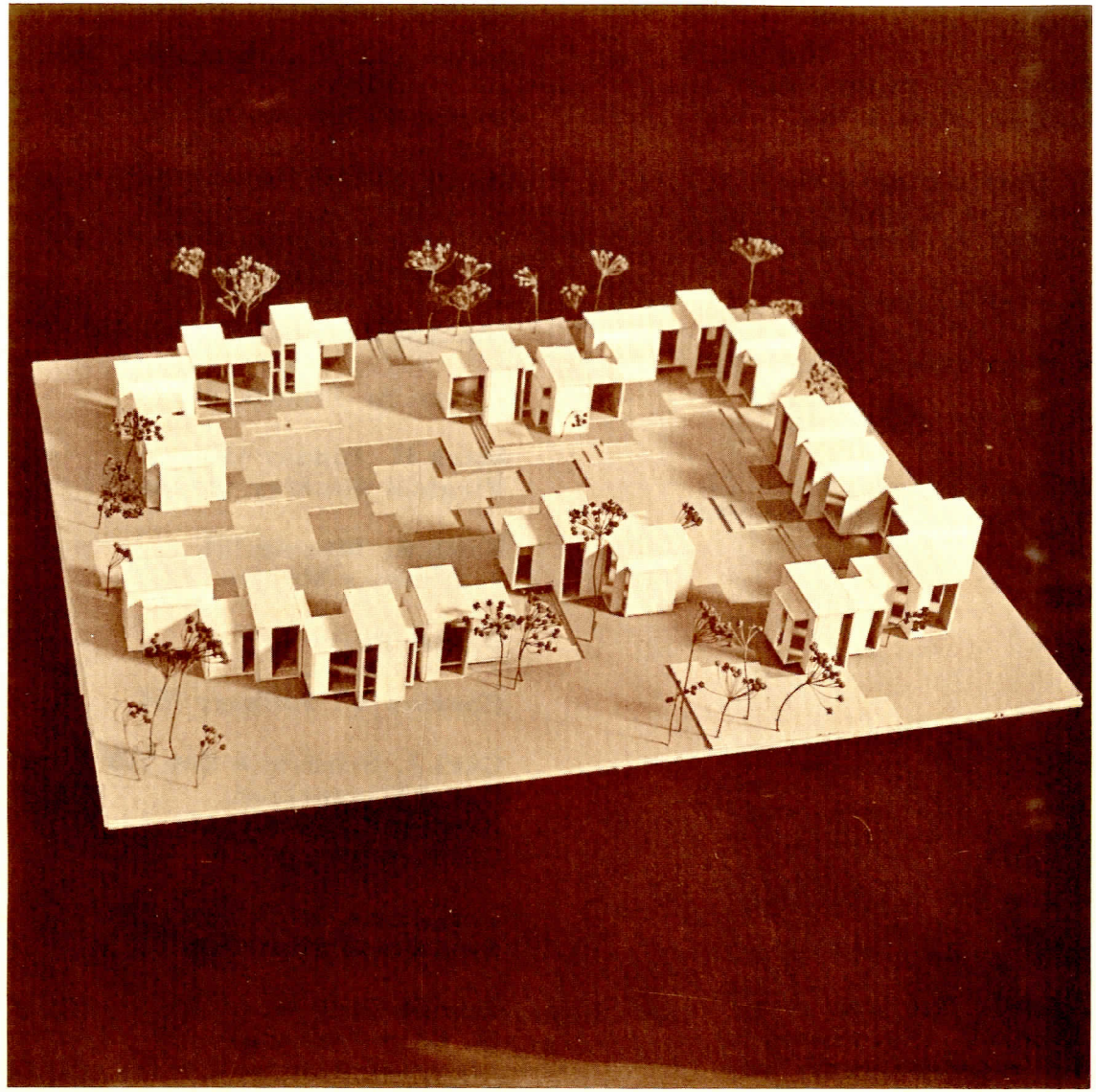
A SMALL LIVING CENTER

howard s. raabe, jr

One reason for weak design is the use of several unrelated ideas. In the living center I attempted to make the units and landscaping one. One can observe how each unit related to its private, exterior areas and adjacent units, how each group of units flows to a semi-private area, and finally, how all the semi-private areas are connected to the semi-public pool area. I experimented with heavy masses, evident on the entrance side, and the abrupt change of space, experienced in traveling from small, private areas, through narrow, low passageway into large, open semi-private areas. The searching out and tenacious use of one idea, using it to advantage in every feasible way, from the designing of an interior space to the complete project, this is the difference between strong and weak design.

The small living center was the finished product following a series of abstract, two-dimensional studies. It was to provide twenty housing units and a pool on a level tract 250' x 300'. We were allowed, if we desired, a maximum man-made contour rise of 2 feet. One last throught before we started was to disregard previous experience and personal feelings about housing, or for that matter, about any of our projects.

In the design of the housing group, one's main concern is the relation of the inhabitants to the total composition. Possibly the reason for today's "modern slums" is the disregard of this fact.



patrons

Guy H. Baldwin '38

Robert Cadigan '09

Francis E Hares '38
John M. Hirsch '43

F. Curtis King '24
Harry A. King '24
Russell A. King '52

Dean D. K. Sargent

William James Taylor '36

Lester D. Young '41

Frederick S. Webster '32
Norman J. Wiedersum '48

subscribers

John G. Baccari
Robert E. Bartmann '59
F. Leslie Bennetts '54
Herbert Boerner '46

J. Anthony Cappuccilli '48
Frederick B. Chadwick '58

Torquato De Felice '34
Salvatore Di Giacomo '34

Maurice J. Finnegan, Jr. '50

Daniel F. Giroux '49
Norman A. Grant '39
Nancy Setright Grove '43

William F. Hermann, Jr. '51
Richard L. Howland '37

Anthony J. Ianniello '55

Myron A. Jordan '28

Mark N. Kidder '30
Virginia Stickley Knight '57

Keith A. Marvin '25
J. Thomas Morton '54

Daniel Perry '30

Charles W. Rothery '54

Carl J. Schmitt & Son '18 & '52
David Slingerland
Newton R. Smith '17
Chester Soling

Frederick G. Taggert '34
John Stone Thornley '29

Joseph Groo Weir '29
D. Carr Whitehead '37

Reuben Zane '56

boosters

Glenn A. Bickerstaff '33
John W. Bogar '53

Eugene T. Campbell '61
George Clymer '58
David M. Crawley '51

Almon J. Durkee '50

Milo D. Folley '38
William D. Foye '53
Angelo P. Franco '61

Lawrence A. Greene, Jr. '57

Wilbur R. Ingalls, Jr. '52

Allen Kosoff '54

George W. Lawson '63
Paul G. Lipps '41
Robert G. Lynch '60

William E. Markley '54
David Briggs Maxfield '30

Nicholas A. Phillips

James E. Robinson III '56
Trevor W. Rogers

C. William Stephanski '62
Robert W. Surra '57
Phyllis H. Swartz '54

Hugh M. Taylor Jr.

Guy H. Webster '61